AH ASTRA

AH Astra Owner’s Handbook

GM Holden Ltd, ABN 84 006 893 232 (hereinafter Holden)

Change of name, address or ownership

In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this vehicle.

If you have recently changed your address, or name, or purchased this vehicle second-hand, please help us to help you by taking a few minutes to fill in and mail the forms at the beginning of the Service/warranty booklet.

For information about GM Holden's privacy policy or to update owner details online, please visit Holden's website at www.holden.com.au

Note Please refer to the inside front cover of the Service/warranty booklet for the Vehicle Identification Certificate.

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We thank you for choosing Holden and want to assure you of our continuing interest in your driving pleasure and satisfaction.

This handbook applies to the current Astra model. Therefore, due to different models and options, you may find reference in this Handbook to some equipment not fitted to your own vehicle.

Please note that all information, illustrations and specifications in this Handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

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*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

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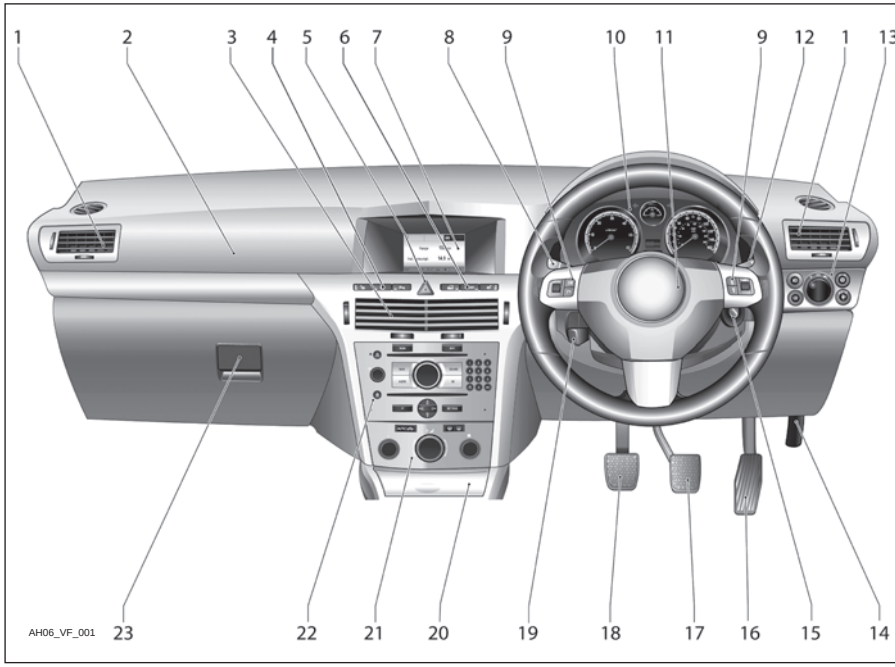
*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

DASHBOARD LAYOUT



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STEERING AND HORN

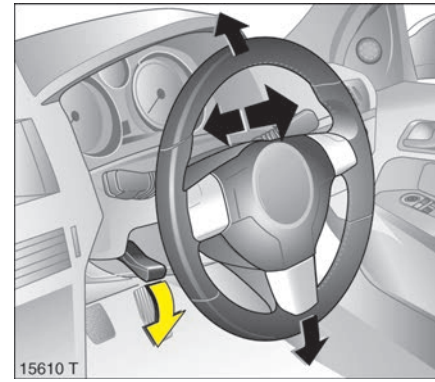
TILT/REACH STEERING

Move the lock lever downwards to adjust the height and reach of the steering wheel.

Push the lock lever upwards to set the adjustment, ensuring the lever clicks into position.

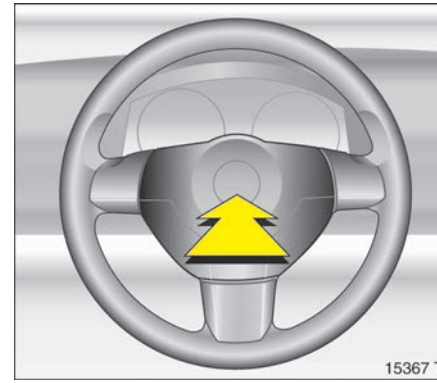
Before driving, jiggle the steering wheel to ensure it has locked securely.

WARNING
Do not attempt to adjust the steering wheel while driving.



HORN

The horn is activated by pressing the symbol in the centre of the steering wheel.



IGNITION SWITCH

Ignition

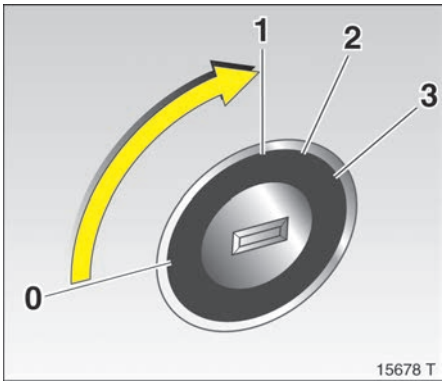
0 LOCK: Ignition off and steering locked (when the key is removed).

1 OFF: Steering unlocked, ignition off.

2 ON: Ignition on.

Diesel engine preheat*.

3 START: Start the engine.



Release the steering column lock

To release the lock, move the steering wheel slightly and turn the key to position 1.

Lock the steering column

Withdraw the key in position **0**.

Note On automatic models the shift lever must be in **P** to withdraw the key.

WARNING

Do not turn the engine off while the vehicle is moving. Power assisted equipment (such as brakes or steering) which are operated by the engine will be ineffective.

- Vehicles with a manual transmission: never remove the key while the vehicle is moving, as this will lock the steering wheel.
- Vehicles with an automatic transmission have a lock which prevents the key from being removed while driving. Refer to *Safety* in chapter 4.

INSTRUMENTATION

GAUGES

Speedometer

The speedometer indicates vehicle speed in kilometres per hour (km/h).

Tachometer

The tachometer indicates engine speed in revolutions per minute (rpm).

Odometer/tripmeter

The small window in the instrument cluster is used for the odometer, clock* and tripmeter. When the ignition is off, briefly press the reset knob to display the odometer and the tripmeter.

The odometer records kilometres travelled since the vehicle was built.

The tripmeter records kilometres travelled on a particular trip. To reset the tripmeter to zero, press and hold the reset knob when the ignition is on.

Fuel gauge

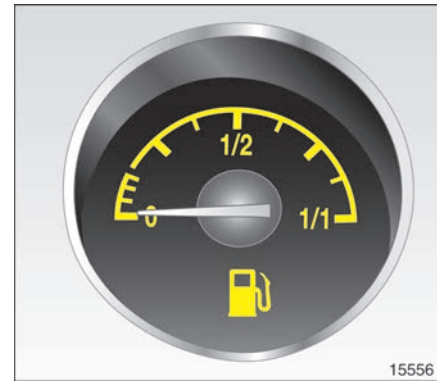
Add fuel to the fuel tank before the tank reaches empty (when the pointer moves to the far left) or when the fuel light illuminates.

If the fuel light flashes, add fuel to the tank immediately. Refer to *Fuel filling* in chapter 5.

Note Never let the tank become empty; this can cause damage to the catalytic converter.

Diesel engines: if run dry, the fuel system must be bled. Refer to *Diesel fuel system bleeding* in chapter 6.

Refer to *Specifications* in chapter 8, for fuel tank capacity.

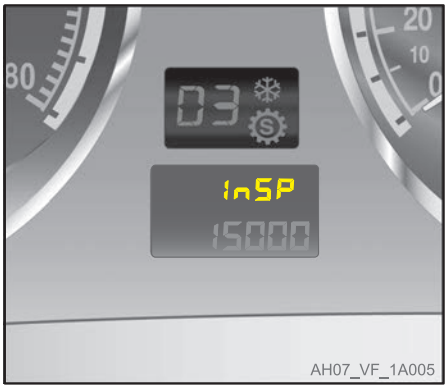


Temperature warning

The engine cooling warning light is used to indicate an over temperature condition.

INSTRUMENTATION cont.

Service reminder



When **InSP** appears in the trip odometer display with the ignition switched on, the vehicle is due for service. Have service work performed within a week or 500 km. Contact your Holden Dealer.

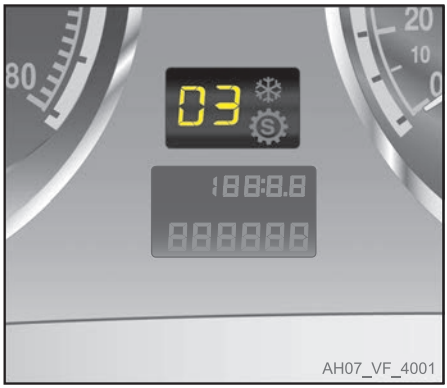
When **InSP2** appears in the trip odometer display with the ignition switched on, this indicates that an exterior lamp bulb has failed. Refer to *Bulb replacement* in chapter 6.

When **InSP3** appears in the trip odometer display with the ignition switched on, this indicates the battery in the key remote control has low voltage. Refer to *Keys* in chapter 2.

Note On vehicles with check control* a message is shown on the display instead of **InSP2** and **InSP3**.

When **InSP4** appears in the trip odometer display with the ignition switched on, the diesel fuel filter* requires draining. Contact your Holden Dealer.

Transmission display*



Display of the selected gear position with automatic transmission*:

P Park position of automatic transmission.

R Reverse gear.

N Neutral or idling position.

D Automatic mode of 4 & 6 speed automatic transmission.

1-4 Current gear of 4 speed automatic transmission.

1-6 Current gear of 6 speed automatic transmission.

M Manual mode of 6 speed automatic transmission.

WARNING/REMINDER INDICATIONS

Battery

Illuminates when the ignition is switched on and extinguishes when the engine is started and engine speed is increased above idle speed.

If the light illuminates when driving, the battery is not being charged. Engine cooling may also be affected. With diesel engines the brake servo unit may stop operating. Consult a Holden Dealer as soon as possible.

Brakes, hydraulic clutch

Illuminates for a few seconds when the ignition is switched on and extinguishes after a few seconds unless the park brake is applied or the brake/clutch fluid levels are low.

If the light illuminates when driving and the park brake is not applied, stop the vehicle as soon as possible and consult a Holden Dealer.

Check engine

This vehicle is fitted with an electronic engine management system. The check engine light indicates when system service is required. The light illuminates when the ignition is switched on and extinguishes shortly after the engine starts to run.

If the light illuminates when driving, the engine management system may require servicing. Even though the vehicle may still be driveable and not require towing, consult the nearest Holden Dealer as soon as possible. Continued driving could affect fuel consumption, engine performance or may damage the catalytic converter.

However, if the light flashes and the engine will not start, switch the ignition off for at least 2 seconds before attempting to start the engine again.

In diesel vehicles* illumination of together with **InSP4** in the service display indicates water in the fuel filter. Refer to *Fuel filling* in chapter 5.

Emissions

This vehicle is fitted with an emission monitoring system.

The light illuminates when the ignition is switched on and extinguishes shortly after the engine starts to run.

If the light illuminates when driving, the emission system may require servicing. Although the vehicle may still be drivable and not require towing, consult the nearest Holden Dealer as soon as possible.

However, if the light flashes while driving, reduce speed until the light stops flashing and take the vehicle to a Holden Dealer as soon as possible.

Engine cooling

If it illuminates when driving, a fault has occurred in the engine cooling system or the air conditioning system. The coolant level should be checked immediately. Refer to *Engine overheating* in chapter 6. If the coolant level is normal, consult your nearest Holden Dealer.

WARNING
Do not remove the cooling system cap if the engine and radiator are still hot.

WARNING/REMINDER INDICATIONS cont.

Engine oil pressure

Illuminates when the ignition is switched on and extinguishes after the engine is started. It can light up intermittently when idling if the engine is hot, but must extinguish when engine speed is increased.

If the light illuminates during driving, stop the vehicle immediately and switch off the engine. Check the engine oil level. Do not drive with this light illuminated. If the oil level is normal, consult your nearest Holden Dealer.

Engine oil level*

Illuminates when the engine oil level is to low, check the oil level and top up if necessary. Refer to *Engine oil level check* in chapter 7.

ABS: anti-lock brake system

Illuminates for a few seconds when the ignition is switched on. If it does not extinguish or if it illuminates when driving, there is a defect in the Anti-lock Brake System (ABS). The brake system remains operational but without ABS assistance. Refer to *Anti-lock brake system* in chapter 4. Consult your Holden Dealer as soon as possible.

High beam

Illuminates when the headlight high beams are in use or flashed.

Parking lights

Illuminates when the parking lights are on.

Rear fog light

Illuminates when the rear fog light is switched on.

Front fog lights*

Illuminates when the front fog lights are switched on.

Left and right turn signal indicators

The respective arrow (left or right) flashes when the turn signal indicators are in use. If the light flashes rapidly, a turn signal bulb may have failed.

Cruise control*

Illuminates when cruise control is activated. Refer to *Cruise Control* further in this chapter.

ESP®*

Illuminates for a few seconds when the ignition is switched on. The system is now ready for operation. Refer to *Electronic stability program* in chapter 4.

Park assist*

If it illuminates when driving, a fault has occurred with the park assist system. Refer to *Park assist* in chapter 4.

WARNING/REMINDER INDICATIONS cont.

Diesel preheating system*

Illuminated during preheating.

Note Preheating system switches on only if outside temperature is low.

Diesel particle filter*

Flashing (in vehicles with diesel particle filter): diesel particle filter requires cleaning. As soon as the road and traffic situation permits it, increase speed to more than 40 km/h for a brief period. The control indicator goes off as soon as cleaning is complete.

Note The engine cooling fan and rear window demister come on during cleaning.

Airbag and seat belt pretensioners

The airbag and seat belt pretensioners warning illuminates until the engine is started. If it does not extinguish or if it illuminates when driving, there is a defect in the airbag/seat belt pretensioner system and they may not function correctly, especially in an accident. Consult your Holden Dealer as soon as possible.

Seat belt

The seat belt warning light flashes when the ignition is switched on unless/until the driver's seat belt is engaged. If the driver's seat belt or the passenger's seat, if it is occupied, is not engaged and the vehicle speed exceeds 25 km/h, a warning chime sounds. The warning chime continues to sound for 3 km or until the seat belt is engaged. This is to remind occupants to fasten their seat belts. The chime also sounds once if the driver's seat belt is released before the ignition is turned off.

Door open

Illuminates when a door or luggage compartment is left open.

Low fuel

Illuminates when the fuel gauge enters the red zone (earlier when driving around bends). If the light flashes, the fuel is about to run out.

Note If diesel engines run dry, the fuel system must be bled. Refer to *Diesel fuel system bleeding* in chapter 6.

Winter mode automatic transmission*

Illuminates when the winter mode is activated.

Sport mode automatic transmission*

Illuminates when the sport mode is activated.

IDS+ Interactive driving system/Continuous Damping Control (CDC)*

Illuminates for approximately 10 seconds after the driver's door is opened. If it illuminates while driving, there is a fault in the system. Consult your Holden Dealer.

WIPERS AND WASHERS

Windscreen wipers

The lever on the left of the steering wheel column controls the windscreen wipers when the ignition is on.

Move the lever upwards to turn the windscreen wipers on or to select the next higher wiper speed.

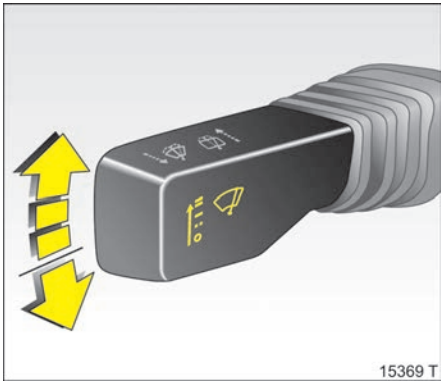
═ Fast

— Slow

- - Intermittent

O Off

Note Never operate the wipers on dry glass, as this will damage the rubber and scratch the glass.

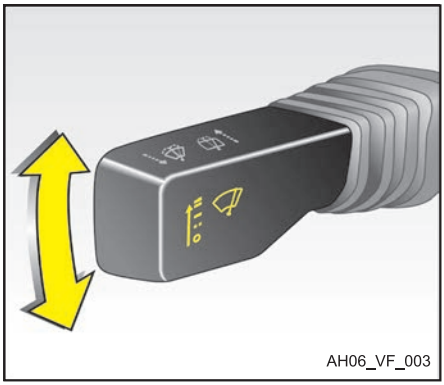


Windscreen wipers – Adjustable wiper interval*

To set the wiper interval to a value between 2 and 15 seconds:

Switch on the ignition. Press the lever down from position O. Wait the desired interval. Set the lever to intermittent – –.

The interval remains stored until the next change or the ignition is switched off. Switching the ignition on and moving the lever to – – sets the interval to 4 seconds.



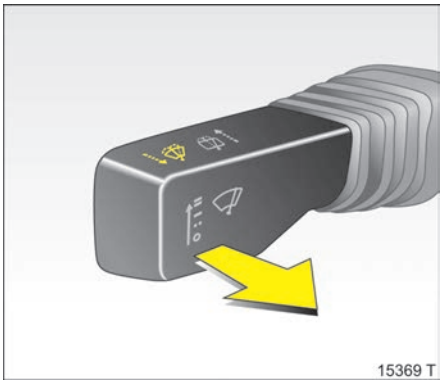
Single windscreen wiper sweep

When the wipers are turned off, push the lever downwards to activate a single sweep.

Windscreen washer

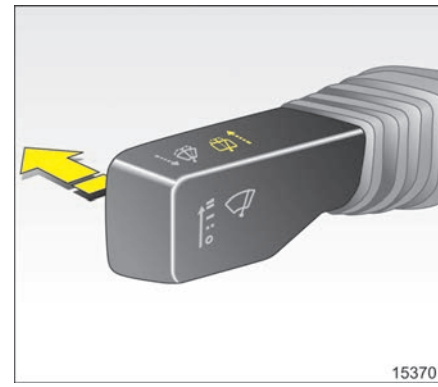
To spray washer fluid onto the windscreen pull the lever toward you.

This also causes the wipers to operate for several sweeps.



WIPERS AND WASHERS cont.

Rear window wiper and washer*



Push the lever away from you to the first stop position to turn on the rear wiper. In this position, the rear wiper operates at an intermittent speed.

To switch off the rear wiper, push the lever away from you once again.

To turn on the rear washer, push the lever further and hold it for as long as required. In this position, the rear wiper operates continuously while the rear washer is operating.

When the lever is returned to the first stop position, the rear wiper operates at an intermittent speed.

The rear window wiper comes on when the front wipers are on and the reverse gear is engaged.

LIGHTS

EXTERIOR LIGHTS

Light switch

Turn the dial to select the following:

O Off

Parking lights

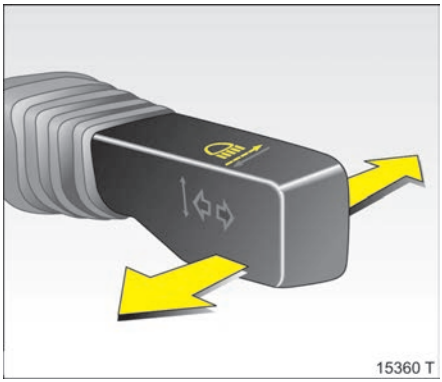
Headlights and parking lights

An audible warning reminds you when you are leaving the vehicle and have left the headlights or park lights on.

High/low beam

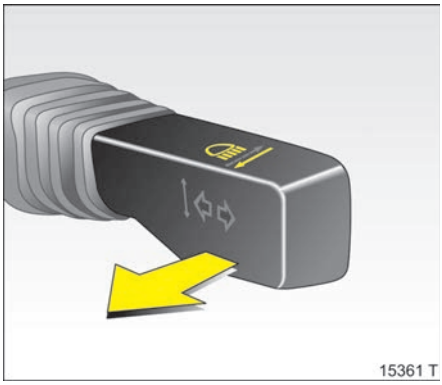
With the headlights switched on, push the lever away from you until you feel a click, then release. The headlights change from low beam to high beam.

Pull the lever back towards the steering wheel to return to low beam. When high beam is in use, the light on the instrument panel illuminates.



Headlight flash

Flash the lights on high beam for signalling purposes (even if the headlights are turned off) by pulling the lever towards you. The lights remain on high beam as long as the lever is held.



LIGHTS cont.

Headlight levelling adjustment

Adjust the headlight levelling to suit the current load in the vehicle by selecting **0**, **1**, **2** or **3** when the headlights are on.

Push to extract the knob, push again to retract the knob.

Depending on the vehicle configuration, the range between some settings of the headlamp levelling adjusting wheel may be extremely small. Correct adjustment of the headlight levelling reduces 'dazzle' for other road users.

0 = Front seats occupied.

1 = All seats occupied.

2 = All seats occupied and load in the luggage compartment.

3 = Driver's seat occupied and load in the luggage compartment.

Front fog lights*

The fog light button is on the upper left-hand side. Push the ≠D button to switch the fog lights on or off. The ≠D light in the instrument panel illuminates when the fog lights are switched on.

Rear fog light

The rear fog light button is on the lower left-hand side. Push the D≠ button to switch the fog light on or off. The D≠ light in the instrument panel illuminates when the fog light is on.

Check your State laws regarding the use of fog lights when driving.

LIGHTS cont.

Instrument illumination

When the vehicle lights are on, adjust the brightness of the display by using the knob to the right of the light switch.

Push to extract the knob, push again to retract the knob.

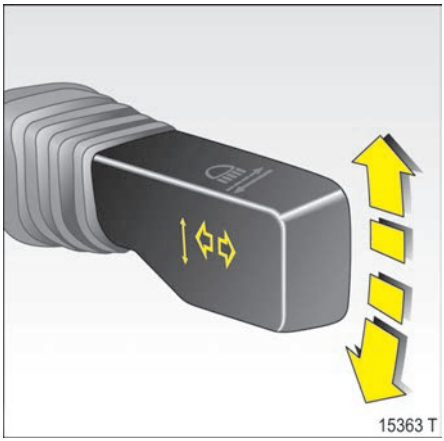
Turn signals

To signal a turn, move the lever in the direction that you intend turning the steering wheel. When the steering wheel returns to the 'straight-ahead' position, the turn signal cancels.

In some turns, such as changing lanes, the steering wheel is not turned enough to cancel the turn signal. In this case, move the lever part way (to the point where resistance is felt) and hold. The lever returns to the neutral position when released.

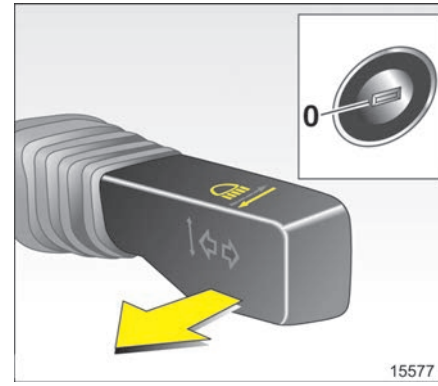
The turn signals flash for three cycles.

If the dashboard indicator light flashes rapidly, a turn signal bulb may have failed. Refer to *Bulb replacement* in chapter 6.



LIGHTS cont.

Lights off delay



The low beam headlights and the reversing lights can be set to turn off 30 seconds after leaving the vehicle. This feature is of particular benefit when parking in unlit parking areas, driveways and garages.

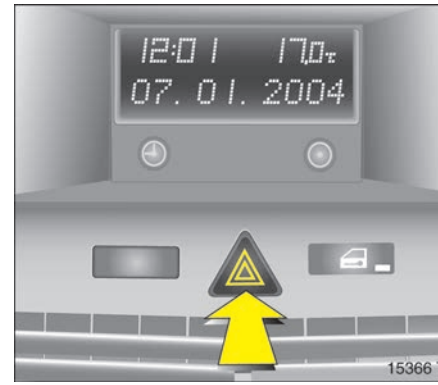
To activate:

1. Remove the ignition key.
2. Open the driver's door and pull the turn signal lever towards the steering wheel, as illustrated.

Cancel this feature by inserting the key into the ignition.

Note If the driver's door is left open, the lights will turn off after 2 minutes.

Hazard



The hazard light switch is located directly above the two centre face-level vents on the dashboard. Push the ⚠ button to switch the hazard lights on or off.

Use the hazard warning flashers to warn other drivers if your vehicle becomes a traffic hazard, day or night.

When the hazard warning flashers are on, the hazard button light flashes in unison with the exterior turn signals.

Use of the hazard warning flashers while the vehicle is moving is illegal in some States.

Hazard warning flashers

If the airbags are triggered, the hazard warning lamps are automatically activated and the central locking system unlocks all doors. Press button ⚠ twice to switch off the hazard warning lamps.

STEERING WHEEL AUDIO CONTROLS

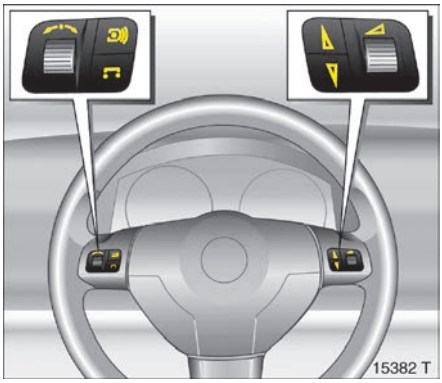
Audio system

If switched on, the audio system stays on until the key is removed from the ignition. Remember to remove the key when leaving the vehicle for any length of time or you may flatten the battery.

Refer to chapter 1B, for additional operating instructions.

Note Due to the nature of the electrical system used within this vehicle, the fitting of an alternative aftermarket audio system is not recommended. To do so could possibly have an adverse effect of the operation of various electrical circuits within the vehicle.

Radio controls in the steering wheel



Left-hand side:

Scroll up/down.

Radio: Next stored station.

CD: Restart CD.

MP3*: Next directory.

Change between radio and CD mode.

Right-hand side

Radio: Upward station search.

CD/MP3: Skip track forward.

Radio: Downward station search.

CD/MP3: Skip track backwards.

Adjust volume.

Mobile phones and CB radios

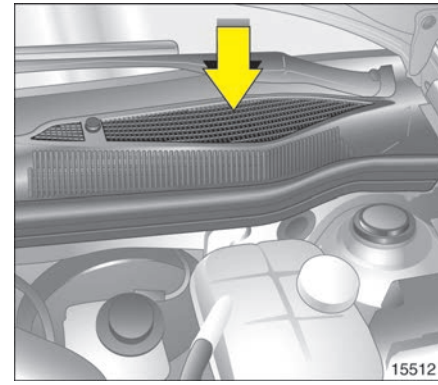
Mobile phones and CB radio equipment which use an integrated antenna may temporarily affect the vehicle's electronics when used inside the vehicle, due to the interference created when transmitting. Therefore, only mobile phones and CB equipment that use an antenna fitted to the outside of the vehicle should be used.

VENTILATION SYSTEM

Air intake

This vehicle features a flow-through ventilation system for your comfort. Under reasonable conditions, it should not be necessary to open the windows at any time.

Outside air is drawn into the vehicle through the exterior opening in front of the windscreen. Do not allow this opening to become clogged with debris, such as leaves or snow.



Pollen filter

It filters out dust, soot, pollen and spores from entering the interior of the vehicle.

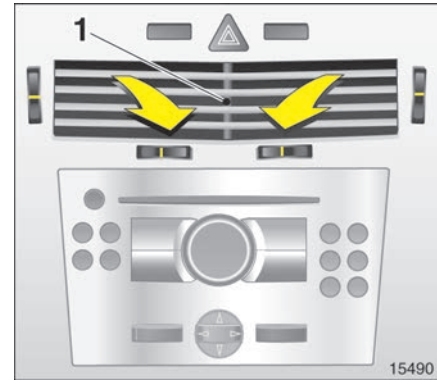
The filter must be replaced at certain intervals. Refer to the Service/warranty booklet.

Centre and side air vents (1)

The face-level vents in the centre and side of the dash panel (**1**) are adjustable. They can be swivelled and tilted as required. They can also be completely shut off by turning the wheel upwards as far as it will go.

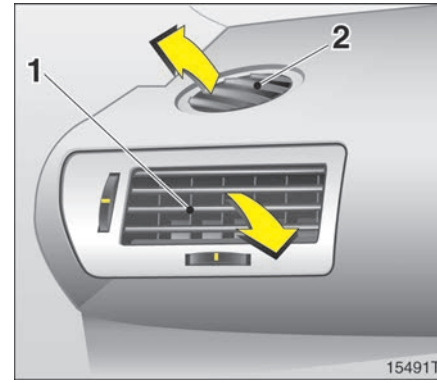
There are additional side air vents and air outlets in the foot wells.

The demist and foot vents are not adjustable as they direct air to the windscreen, windows or feet in the most efficient way.



Windscreen demister vents (2)

Switch air distribution to or . Air flows onto the windscreen and side windows.



MANUAL HEATER, AIR-CONDITIONING

Heated front seats*

Seat heating only operates when the ignition is switched on.

To switch on:

Press the switch one or more times to set the desired heat setting. The indicator lights in the switch show which of the three heating levels is active.

To switch off:

Press the switch repeatedly until the indicator lights go out.

Note Prolonged use of seat heating is not recommended for people with sensitive skin.

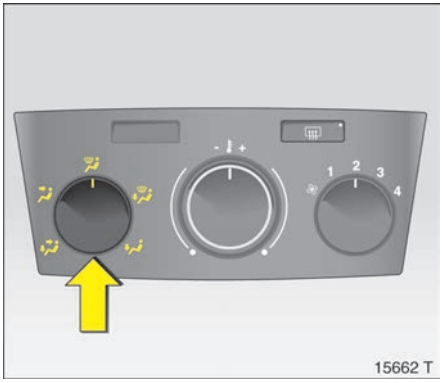
Vent dial

The vent dial is a rotary switch. Set this to any position at or between the symbols to select the air flow distribution.

Open the vents to allow air flow when selecting or .

- Centre vents and foot vents.
- Face level vents.
- Windscreen and side demist vents.
- Windscreen, side demist vents and foot vents.
- Foot vents.

When or is selected, a small amount of air is also supplied to the side air vents. Close the side air vents if this is not desired.



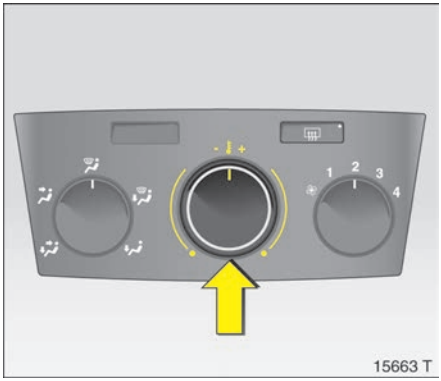
Temperature dial

The temperature dial is a rotary switch which is used to adjust the mix of cold and hot air to set the temperature as desired.

Anticlockwise = Cool.

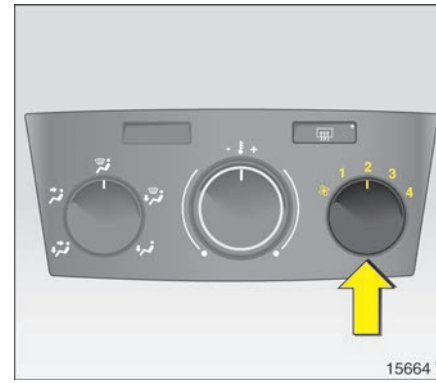
Clockwise = Warm.

Note Heat is not available until the engine warms up. Keep the vents closed until the engine has warmed up, then direct the vents towards the side windows (if required) to aid demisting.



MANUAL HEATER, AIR-CONDITIONING cont.

Fan dial



The fan dial is a rotary switch which is used for selecting the rate of air flow.

✱ = Off.

1 = Low.

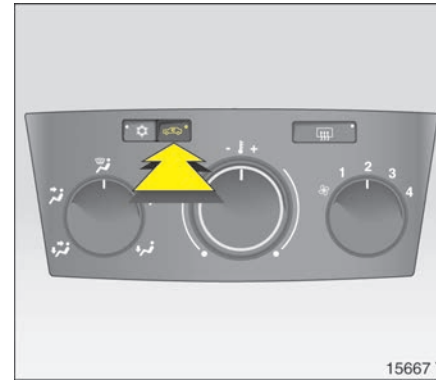
2 = Medium low.

3 = Medium high.

4 = High.

Note The rate of air flow is determined by vehicle speed, as well as by the fan.

Air recirculation



Press the button to switch between recirculated and outside air. The light in the switch illuminates when the recirculate setting is selected.

When following another vehicle on dusty roads, or to prevent exhaust fumes or odours entering your vehicle, press the button to the recirculation position (the light in the switch illuminates). This minimises the entry of outside air.

To further inhibit the entry of dust and fumes, close the windows and turn on the fan, preferably to a high speed. This generates positive air pressure in the passenger compartment.

If occupants are smoking, do not use the recirculate position as the tobacco smoke adheres to the air ducts and will produce stale smelling air.

Where the dust is not airborne (even when driving on an unsealed road), select fresh air intake.

Note When recirculated air is selected, the humidity increases, the windows can mist up and the quality of the passenger compartment air deteriorates. This may cause the vehicle occupants to feel drowsy. Therefore, this setting is not recommended for long periods of time.

MANUAL HEATER, AIR-CONDITIONING cont.

HEATING

The amount of heat is dependent on the coolant temperature and is therefore not fully attained until the engine is warm.

For rapid warming of the passenger compartment:

- Switch off the air conditioner.
- Switch on air recirculation, if required.
- Set the vent dial to the desired position.
- Turn the temperature dial clockwise as far as it will go.
- Turn the fan dial to fan speed 3.

The comfort and general well-being of the vehicle occupants are to a large extent dependent on a suitable ventilation and heating setting.

Ventilation without using air conditioning

To conserve fuel when air conditioning is not required:

- Switch off the air conditioner.
- Switch off air recirculation, if required.
- Set the vent dial to the desired position.
- Turn the temperature dial anti-clockwise as far as it will go.
- Set fan speed as required.
- Open all vents.

MANUAL HEATER, AIR-CONDITIONING cont.

AIR CONDITIONING

Air conditioning not only cools the air but also removes moisture. If the temperature dial is moved away from extreme cold, the air is reheated before entering the cabin.

Switch the air conditioning on by pushing the ✲ button. A light in the switch illuminates when the air conditioning is operating. The fan automatically runs at low speed; this can be increased if required.

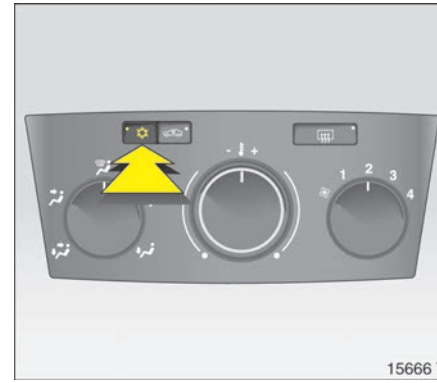
The air conditioning system operates only in the temperature ranges for which it is required. It switches off automatically when the outside temperature is below + 4 °C.

To conserve fuel, switch off the air conditioning in cold weather. However, once a month (with the engine running) switch the air conditioning on for 5 to 10 minutes, even in winter. This lubricates the air conditioning system.

Open at least one vent when the air conditioning is on, so that the evaporator does not ice up due to a lack of air movement.

Normal cooling

- Press the ✲ button to turn the air conditioning on.
- Switch the air intake button to the fresh air position.
- Turn the temperature dial to a cold setting.
- Adjust the fan speed as required.
- Set the vents dial to face-level vents.
- Open all vents.



Maximum cooling in hot weather

Use this setting when the vehicle's interior is especially hot, for example when it has been left in the sun.

Open the windows briefly so that warm air can escape quickly.

- Turn the air conditioning ✲ on.
- Switch the air recirculation system button ⟲ on.
- Turn the temperature dial to cold.
- Turn the fan to the highest speed.
- Set the vents dial to face-level vents.
- Open all vents.

Do not leave recirculation on for too long as no outside air is drawn into the vehicle; the passenger compartment air is recirculated and may become stale.

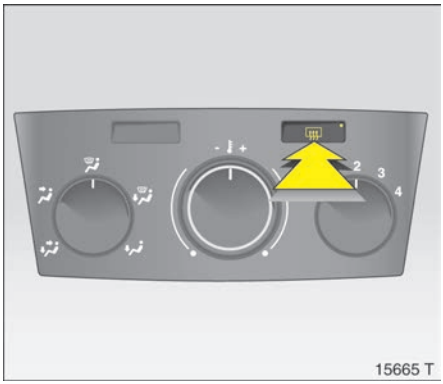
MANUAL HEATER, AIR-CONDITIONING cont.

DEMISTING

- Press the ❄ button to turn the air conditioning on.
- Switch the air intake button to fresh.

  Note Air intake will automatically switch from recirculation to fresh air when the vents dial is rotated to demist mode.
- Turn the temperature dial to hot.
- Turn the fan to speed 4.
- Set the vents dial to demist or demist and foot-level vents.
- Open all side air vents as required.
- Close all dashboard vents.

Heated rear window and heated exterior mirrors



Press the button to turn demisting on or off.

Note The light in the button illuminates when demisting is operating.

Demisting is provided for the rear window as well as the outside mirrors.

Demisting only operates when the engine is running.

Demisting automatically switches off after approximately 15 minutes.

Note

- Vehicles with diesel particle filter* the heated rear window is automatically switched on during particle filter cleaning.
- On vehicles with TwinTop convertible hardtop the rear demister and outside mirror heating is deactivated when the roof is open.

Outside temperature

A fall in temperature is indicated immediately. A rise in temperature is indicated after a time delay.

WARNING
The road surface may already be icy even though the display indicates a few degrees above 0 °C.

To warn the driver that the road surface may be icy, the display changes automatically to a light when the temperature drops to 3 °C or below. The light does not disappear from the display until the outside temperature reaches 5 °C.

*SEMI AUTOMATIC AIR-CONDITIONING SYSTEM**

Semi automatic air-conditioning provides a uniformly comfortable interior regardless of the weather, outside temperature or season.

To ensure a constant and comfortable climate in the vehicle, the temperature of the inflowing air and the air-flow rate are changed automatically based on climate conditions outside the vehicle.

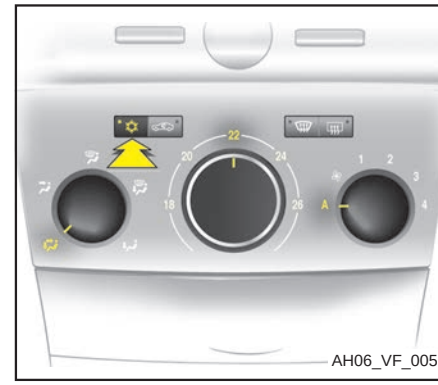
Temperature changes due to external influences, such as direct sunlight, are automatically compensated.

Automatic mode

Basic setting for maximum comfort:

- Set the fan switch to **A**.
- Set the air distribution switch to the desired position - see below.
- Use the rotary switch to set the temperature to 22 °C (a higher or lower temperature can be set as desired).
- Switch on the air conditioning if required – see further on in this chapter.
- Open all front air vents.

Note Deactivation of the air conditioning compressor can reduce the level of comfort and safety – see further on in this chapter.

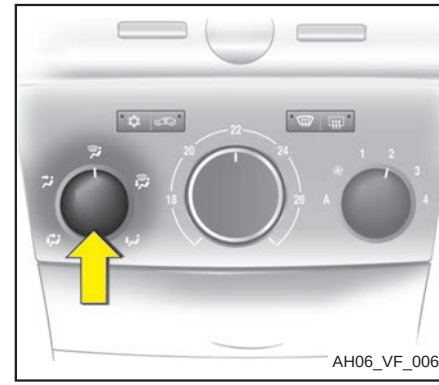


Air distribution setting

- To head area via adjustable air vents and to foot well.
- To head area via adjustable air vents.
- To the windscreen and front door windows.
- To the windscreen, front door windows and foot well.
- To foot well.

Intermediate settings are possible.

Open the air vents when the switch is set to and .



SEMI AUTOMATIC AIR-CONDITIONING SYSTEM cont.*

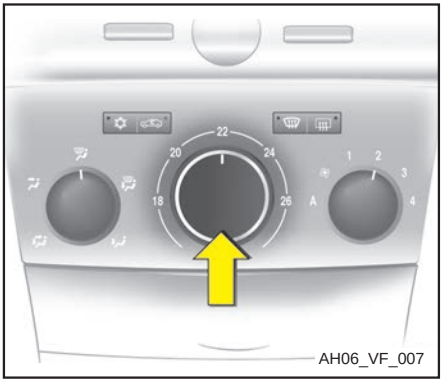
Temperature preset

Set the rotary switch to a value between 17 °C and 27 °C. Intermediate settings are possible.

The selected temperature is maintained.

For reasons of comfort, temperature can only be changed in small increments.

There is no temperature control for settings below 17 °C (all the way left) or above 27 °C (all the way right). The air conditioning system works at maximum cooling or heating.



Air flow setting

1-4 Manual fan speed setting. Intermediate settings are possible.

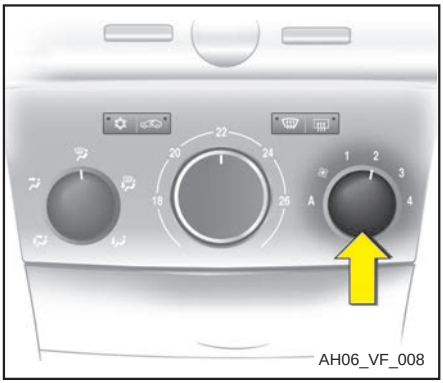
A Automatic control of fan speed.

✤ Fan off.

Fan speed is regulated to provide the rate of air flow necessary to maintain the pre-selected temperature.

Select automatic mode for the highest level of comfort.

When the fan is off, the air conditioning compressor is also off.



To activate/deactivate air conditioning compressor (cooling) ☼

Operate only with the engine on and the fan running:

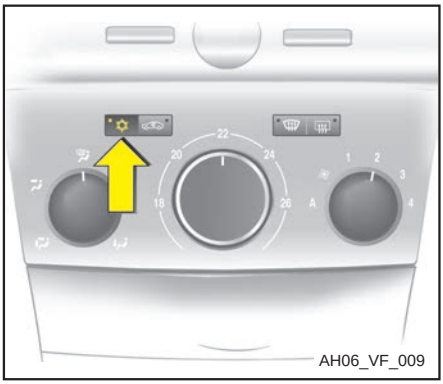
On = Press ☼.

Off = Press ☼ again.

The control indicator in the switch illuminates.

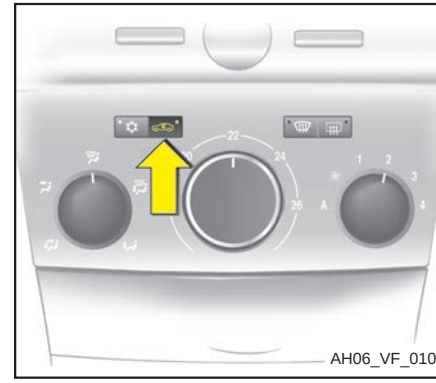
When cooling (air conditioning compressor) is active, air is cooled and dehumidified. If cooling or dehumidification is not desired, switch off cooling in order to save fuel.

Cooling switches off automatically at low outside temperatures.



SEMI AUTOMATIC AIR-CONDITIONING SYSTEM cont.*

Manual air recirculation mode



The air recirculation system prevents the entry of outside air and the air in the passenger compartment is circulated.

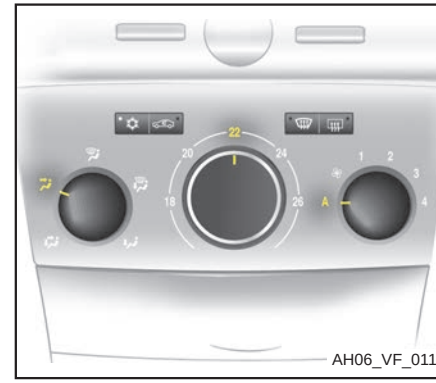
Press the button – the control indicator in the button will illuminate.

The exchange of fresh air is reduced in air recirculation mode. The quality of the passenger compartment air deteriorates which may cause the vehicle occupants to feel drowsy.

Note When operating without the air conditioning turned on, the air humidity increases, and the windows may mist up. Consequently, manual air recirculation should only be run for short periods of time.

To deactivate manual air recirculation: press the button again. The control indicator in the button will go out.

Ventilation



For maximum ventilation in the head area: set the air distribution switch to and open all vents.

For ventilation to foot well: set the air distribution switch to .

For simultaneous ventilation to the head area and the foot well: set air distribution switch to .

- Set the desired temperature.
- Set the fan switch to **A**.

The fan can also be manually set: set the rotary switch to position **1-4**. Intermediate settings are also possible.

SEMI AUTOMATIC AIR-CONDITIONING SYSTEM cont.*

Heating

The amount of heat is dependent on the coolant temperature and is thus not fully attained until the engine is warm.

For rapid warming of the passenger compartment:

- Set the air distribution switch to the desired position – see *Air distribution setting* previously in this chapter.
- Set the centre rotary switch to the desired temperature. We recommend a value of about 22 °C.
- Set the fan switch to **A**. The fan can also be manually set: set the rotary switch to position **1-4**. Intermediate settings are also possible.

The comfort and general well-being of the vehicle occupants are to a large extent dependent on a suitable ventilation and heating setting.

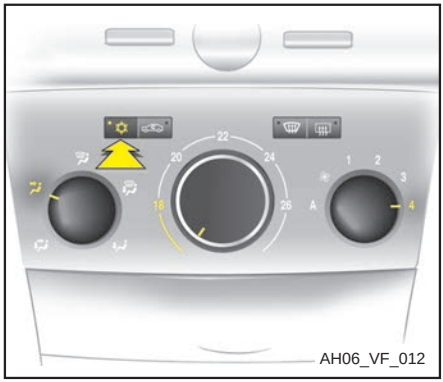
To obtain a stratification of temperature in the vehicle with the pleasant effect “cool head and warm feet”, set the air distribution switch to or , set the temperature switch to about 22 °C and open the centre air vents.

Maximum cooling for very hot interior

- Open windows briefly so that warm air can escape rapidly.
- Set the cooling on.
- Set the air distribution switch to .
- Set the temperature switch to the desired temperature.
- Set the fan switch to **A**.
- Open all vents.

The semi automatic air-conditioning system provides maximum cooling down to the set value.

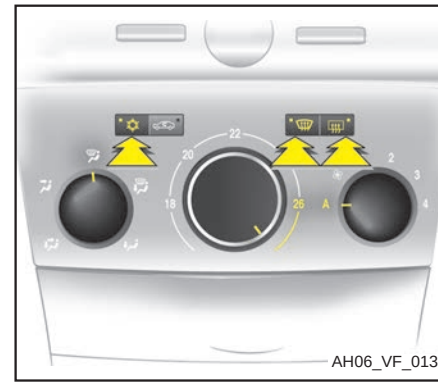
At settings below 17 °C (rotary switch all the way to the left), the system continually runs with maximum cooling. When the air conditioning compressor is running, the system is automatically set to air recirculation.



SEMI AUTOMATIC AIR-CONDITIONING SYSTEM cont.*

Window demisting

WARNING
Disregarding the settings described can cause the windows to become misted up which can lead to accidents due to lack of proper vision.



Misted windows, due to e.g. damp weather, damp clothing or low outside temperatures:

- Set the cooling on.
- Press button : in switch position **A**, the fan automatically switches to the highest speed and air is directed to the windscreen.
- Set temperature to maximum heating, i.e. turn the centre rotary switch all the way to the right (28 °C).
- Switch on the heated rear window .

The demister automatically switches off after approximately 15 minutes.

Note Vehicles with diesel particle filter* the heated rear window is automatically switched on during particle filter cleaning.

Operation with cooling (air conditioning compressor) is not possible when outside temperatures are low.

- To switch off, press button again; the automatic air conditioning system will operate at the settings selected previously.

*CLIMATE CONTROL**

Electronic climate control

The system provides maximum comfort in any weather, at any outside temperature and during any season.

To ensure a constant and comfortable climate in the vehicle, the temperature of the inflowing air, the airflow rate and the air distribution are changed automatically according to climatic conditions outside the vehicle.

Temperature changes due to external influences such as direct sunlight, are compensated for automatically.

When the air conditioning is on, the air is cooled and dehumidified.

When set to automatic mode, the electronic climate control system provides the optimum settings under almost all conditions. If necessary, adjust the system manually using the menu.

The electronic climate control system is only fully operational when the engine is running. At low outside temperatures, the air conditioner switches off automatically.

Automatic mode

Basic setting for maximum comfort:

1. Press the **AUTO** button.
2. Open all the air vents.
3. Set the preselected temperature using the left rotary knob.
4. For air conditioning activation settings, refer to *Activating and deactivating the air conditioning* further on in this section.

If necessary, the preselected temperature can be set higher or lower.

Preselected temperatures

Adjust the preselected temperature to values between 16 °C and 28 °C using the left-hand rotary knob. For comfort, only change the preselected temperature in small steps.

If a temperature below 16 °C is set, **LO** appears in the display. This means the electronic climate control system constantly runs with maximum cooling. With this setting, the temperature is not regulated.

If a temperature above 28 °C is set, **HI** appears in the display. This means the electronic climate control system constantly runs with maximum heating. With this setting, the temperature is not regulated. The preset temperature setting is retained when the ignition is switched off.

CLIMATE CONTROL cont.*

Manual settings

Under certain circumstances (for example, iced or misted windows) the functions of the electronic climate control system can be changed manually.

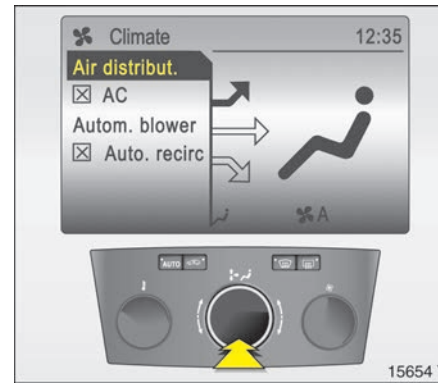
Electronic climate control settings can be changed via the centre rotary knob. The buttons and menu buttons are depicted on the display.

Press the centre rotary knob to call up the menu. The menu for manual climate control settings appears in the display.

Individual menu items are marked by turning the centre rotary knob and selected by pressing it. Selecting certain menus will open a submenu.

To exit a menu, turn the centre rotary knob left or right to **Return** or **Main**, and select by pressing it.

Manual settings are stored when the ignition is switched off.



Window demisting

WARNING
Disregarding the settings described can cause the windows to become misted up which can lead to accidents due to lack of proper vision.

Press the button. The icon appears in the display and the control indicator in the button illuminates.

The temperature and the air distribution are adjusted automatically, the fan runs at a faster speed and windows are rapidly cleared of ice and moisture.

The airflow can be increased or decreased by turning the right rotary knob.

To return to automatic mode, press the button or select **AUTO**.

CLIMATE CONTROL cont.*

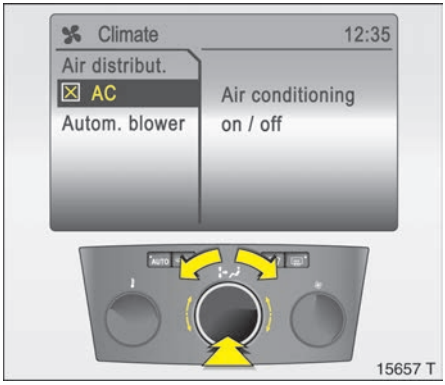
Activating and deactivating the air conditioning

The air conditioner is automatically regulated to provide the greatest possible comfort with the least amount of fuel consumption.

If cooling or dehumidification is unnecessary (in order to save fuel), switch off the air conditioning. In the menu for manual settings, select **AC** and press to select. **Eco** appears in the display.

Inflowing air is neither cooled nor dehumidified. This restricts the level of comfort provided by the electronic climate control system. This may cause the windows to mist up, for example.

To activate cooling: In the manual settings menu, select **AC** and press to activate cooling.



Air distribution

Press the centre rotary knob. The possible air distribution settings appear one after another in the display.

Air distribution can also be set in the **Air distribut.** menu:

Up — Air distribution to the windscreen and front side windows.

Centre — Air distribution to the vehicle occupants through adjustable air vents.

Down — Air distribution to the front and rear foot area.

To return to automatic mode, deactivate the current setting, or press **AUTO**.

Air flow

Turn the right rotary knob to the right or left. The selected fan speed is displayed with the ✻ icon and the number in the display.

At **0** speed, both the fan and air conditioner are switched off.

To return to automatic mode, press the **AUTO** button.

CLIMATE CONTROL cont.*

Fan regulation in automatic mode

Fan regulation in automatic mode can be modified.

In the menu for manual settings, select the item for the **Autom. blower.** Select the desired regulation.

Depending on the setting, the maximum airflow, and therefore the noise level, will increase.

Manual air recirculation

Press the button to switch between recirculated and outside air. The light in the switch illuminates when the recirculate setting is selected.

The exchange of fresh air is reduced in air recirculation mode. The quality of the passenger compartment air deteriorates which may cause the vehicle occupants to feel drowsy. In operation without cooling, the air humidity increases, so the windows may mist up. Consequently, the air recirculation system should only be run for short periods of time.

To switch off the air recirculation, press the button again.

CLIMATE CONTROL cont.*

Air conditioning with the engine not running

When the vehicle is stationary (and the ignition is off), any heating or cooling power still in the system can be used to condition the passenger compartment.

Press **AUTO** with the ignition off.

'Residual air conditioning on' is displayed briefly.

Air conditioning operates for a period of 10 seconds.

To deactivate air conditioning, press the **AUTO** button.

Switching off the electronic air conditioning system

Turn the right-hand switch anticlockwise as far as it will go. The display read-out extinguishes.

The air distribution setting remains at the position last selected.

To switch on the electronic climate control system, press the **AUTO** button or turn the right-hand switch clockwise.

General information

If the windscreen mists up during damp weather, set the electronic climate control system as described in *Window demisting* previously in this chapter.

The electronic climate control system functions most efficiently when the windows are closed. If the passenger compartment has heated up considerably after a long period in direct sunlight, briefly open the windows so that the heated air can quickly escape.

Do not cover the sensor between the air vents in front of the windscreen.

Maintenance

Operate the air conditioner at least once a month for a few minutes, regardless of the weather and time of year.

If a fault occurs in the electronic climate control system, consult a Holden Dealer.

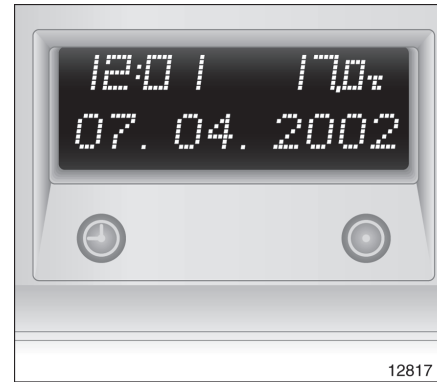
TRIPLE INFORMATION DISPLAY*

When the ignition is on, the triple information display shows time and outside temperature. The date is displayed when the audio system is off.

When the ignition is off, you can display the time, date and outside temperature for approximately 15 seconds by briefly pressing one of the buttons below the display.

When the park lights or headlights are switched on, you can adjust the brightness of the display by using the button to the right of the headlight switch.

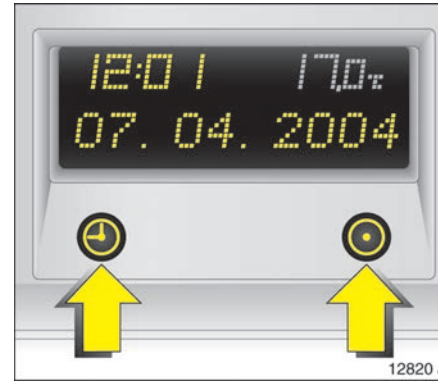
Display of **--.-°C** or **F** in the display indicates a fault. Contact a Holden Dealer to have the cause remedied.



12817 J

Setting date and time

1. Switch on the ignition and switch off the audio system.
2. Press the ◴ button for approximately 2 seconds. The day flashes.
3. Press the ⊙ button until day is correct.
4. Press the ◴ button. The month flashes.
5. Press the ⊙ button until month is correct.
6. Press the ◴ button. The year flashes.
7. Press the ⊙ button until year is correct.
8. Press the ◴ button. The hours flashes.
9. Press the ⊙ button until hour is correct.
10. Press the ◴ button. The minutes flashes.
11. Press the ⊙ button until minute is correct.
12. Press the ◴ button. The clock starts at 0 seconds.



12820 J

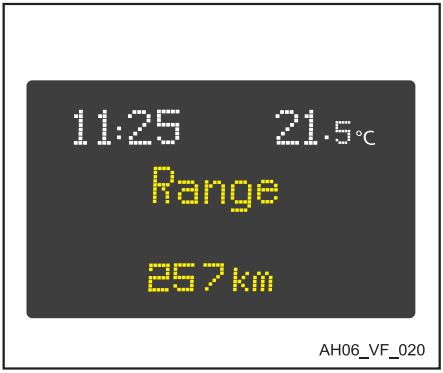
BOARD INFORMATION DISPLAY*

Selecting functions

Functions and settings of some equipment* can be accessed via the board information display.

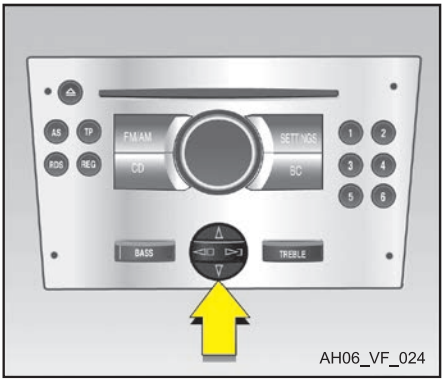
This is done via the menus and the buttons/four-way button on the audio system* or with the left adjuster wheel* on the steering wheel. The relevant menu options are then shown on the subsequent row of the display.

Note An **F** in the display indicates a fault consult your Holden Dealer.



AH06_VF_020

Select options via the menus and with the buttons/four-way button on the audio system*.



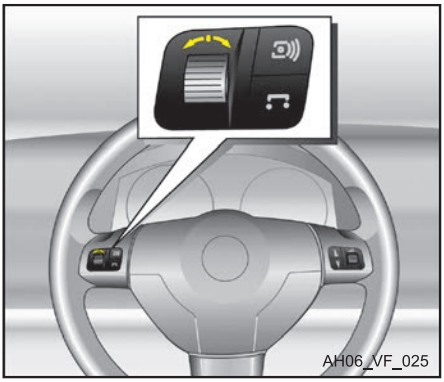
AH06_VF_024

Depending on the equipment level of the vehicle, menu options can be selected with the left adjuster wheel* on the steering wheel. The relevant menu options are then shown on the subsequent row of the display.

If check control* issues a warning message, the display is blocked from other functions. Acknowledge the message by pressing the right or left button of the four-way button or by pressing the left adjuster wheel* on the steering wheel. If there are several warning messages, acknowledge them one at a time.

For system settings – refer further on in this chapter.

For trip computer – refer further on in this chapter.


AH06_VF_025

BOARD INFORMATION DISPLAY cont.*

System settings

Press the **Settings** button of the audio system. Menu item **Audio** or **System** will appear.

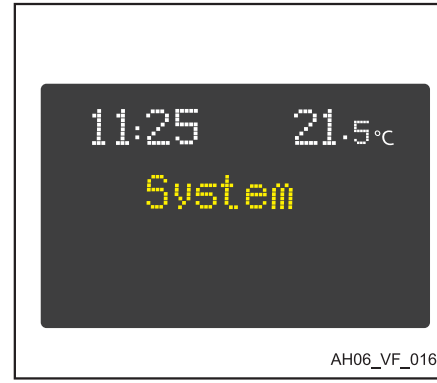
Press the lower button of the four-way button to reach menu item **System**. After pressing the right-hand part of the four-way button, the first function of the **System** menu is shown.

Some of the functions appear on the display in an abbreviated form.

The functions are displayed in the following order:

- Clock sync off.
- Time, setting hours.
- Time, setting minutes.
- Date, setting day.
- Date, setting month.
- Date, setting year.
- Ignition logic.
- Language selection.
- Setting units of measure.

Note Clock sync not available in Australia.



Setting date and time

Select the menu item for time and date setting from the **Settings** menu.

Make the desired setting.

The setting is saved when the menu item is exited.

BOARD INFORMATION DISPLAY cont.*

Ignition logic*

Refer to *Switching on/off* in chapter 1B.

Language selection

You can select the display language for some functions.

Select the menu item for language from the **Settings** menu and make the desired setting.

Setting units of measure

You can select which units of measure are to be used.

Select the menu item for units of measure from the **Settings** menu and make the desired setting.

For Australia/New Zealand, select the **Europe-SI** option.

BOARD INFORMATION DISPLAY cont.*

Trip computer

The trip computer provides information on driving data, which is continually recorded and evaluated electronically.

Access trip computer vehicle data by pressing the **BC** button on the audio system or the left adjuster wheel on the steering wheel.

Some of the functions appear on the display in an abbreviated form.

Once an audio function has been selected, the subsequent rows of the trip computer function are displayed.

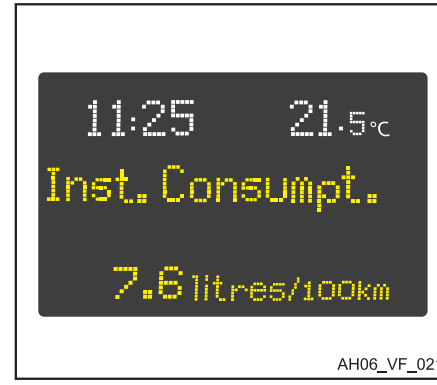
The functions are displayed in the following order:

- Instantaneous consumption.
- Average consumption.
- Trip consumption.
- Average speed.
- Trip distance.
- Range.
- Stop watch.

Instantaneous consumption

Display changes depending on speed:

Display in l/h	below 13 km/h.
Display in l/100 km	above 13 km/h.



Average consumption

Display of average consumption. Calculation can be restarted at any time.

Trip consumption

Displays amount of fuel consumed. Measurement can be restarted at any time.

Average speed

Display of average speed. Calculation can be restarted at any time.

Stoppages in the journey with the ignition off are not included in the calculations.

Trip distance

Displays number of kilometres driven. Measurement can be restarted at any time.

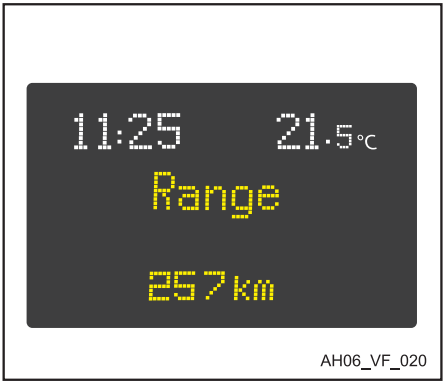
BOARD INFORMATION DISPLAY cont.*

Range

Range is calculated from current fuel tank content and instantaneous consumption. The display shows average values.

After refuelling, the vehicle updates the range automatically after a brief delay.

If the fuel in the tank will allow less than 50 km of travel, the warning **Range** appears on the display.



Stop watch

Operation with the four-way button:

Press the right button	Start/Stop
Press the left button for at least 2 seconds	Reset

Operating using the left adjuster wheel on the steering wheel:

Press	Start/Stop

Resetting trip computer information

The following trip computer information can be reset (restart of measurement/ calculation):

- Average consumption.
- Trip consumption.
- Average speed.
- Distance travelled.

Select the desired trip computer information.

Reset by pressing the left adjuster wheel on the steering wheel or the right or left button on the four-way button:

Press for more than 2 seconds	Current value.
Press for more than 4 seconds	All values.

Interruption of power supply

If the power supply has been interrupted or if the battery voltage has dropped too low, the values stored in the trip computer will be lost.

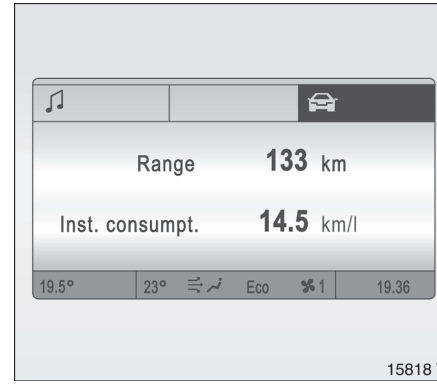
*MULTI-INFORMATION DISPLAY**

Multi-information display

Functions and settings of some equipment can be accessed via the multi-information display.

These functions are marked/executed from the menus in the display using the left adjuster wheel on the steering wheel, the multi-function button on the audio system or the four-way button on the audio system.

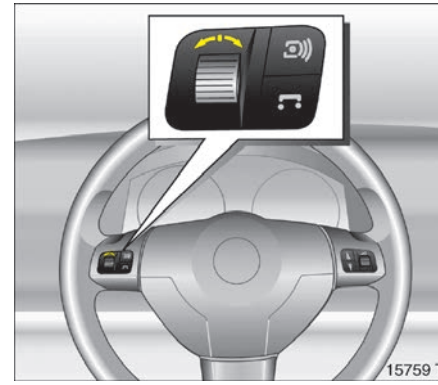
When the park lights or headlights are switched on, you can adjust the brightness of the display by using the button to the right of the headlight switch.



Left adjuster wheel

To select using the left adjuster wheel on the steering wheel:

Turn up	Previous menu item.
Turn down	Next menu item.
Press	Select marked item, confirm command.

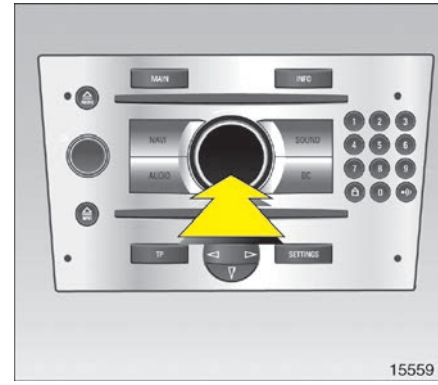


Multi-function button

To select using the multi-function button:

Turn	Mark menu options, functions or commands.
Press	Select marked item, confirm command.

To exit a menu, turn the multi-function button left or right to **Return** or **Main** and then select by pressing it.



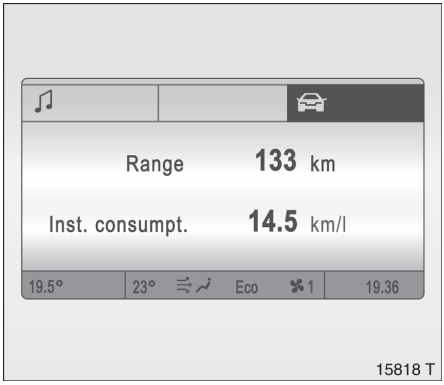
MULTI-INFORMATION DISPLAY cont.*

Four-way button

Select options via the menus and with the buttons/four-way button on the audio system.

Menus and displays

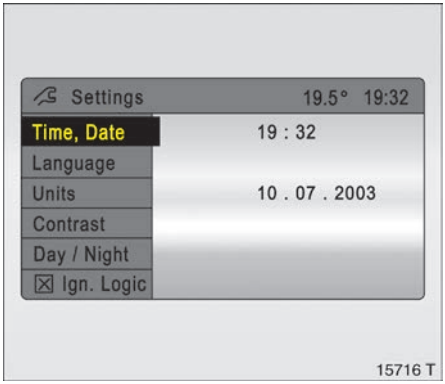
Some menus and displays can be accessed by selecting the function from the top row of the display.



System settings

The settings are accessed via the **Settings** menu.

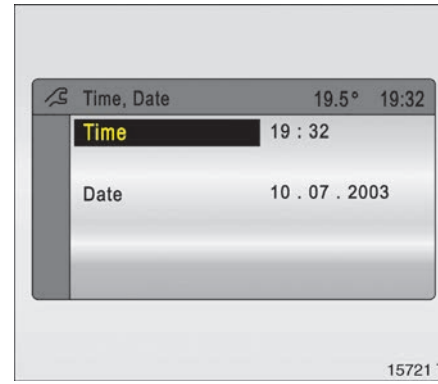
- Press the main button* on the audio system (call up main display).
- Press the **Settings** button on the audio system.
  - The **Settings** menu will be displayed.



MULTI-INFORMATION DISPLAY cont.*

Setting date and time

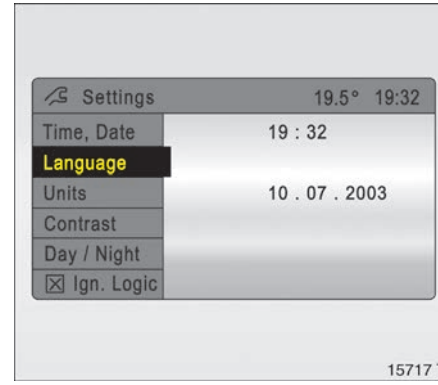
- Select **Time, Date** from the **Settings** menu.
  - The menu for **Time, Date** will be displayed.
- Select the menu items required.



Language selection

You can select the display language for some functions.

- Select **Language** from the **Settings** menu.
  - The available languages are displayed.



- Select the desired language.

Selections are indicated by a ► in front of the menu item.

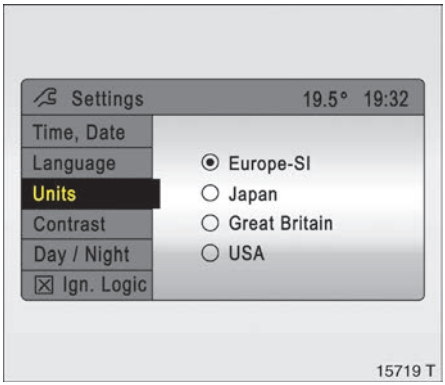
MULTI-INFORMATION DISPLAY cont.*

Setting units of measure

You can select which units of measure are to be used.

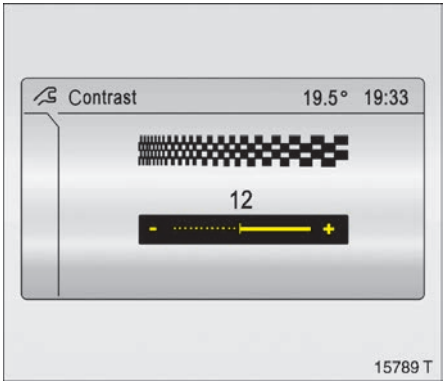
- Select **Units** from the **Settings** menu.
  - The available units are displayed.
- Select the desired unit.
  - Selections are indicated by a ● in front of the menu item.

For Australia/New Zealand, select the **Europe-SI** option.



Adjusting contrast

- Select **Contrast** from the **Settings** menu.
  - The **Contrast** menu will be displayed.
- Confirm the required setting.



Setting display mode

The display can be adjusted to suit the light conditions, black text on a light background or light text on a black background.

- Select **Day/Night** from the **Settings** menu.
  - The options are displayed:

    Automatic Adaptive based on vehicle lighting.
    Always day design Black text on a light background.
    Always night design Light text on a black background.

    Selections are indicated by a ● in front of the menu item.

MULTI-INFORMATION DISPLAY cont.*

Trip computer

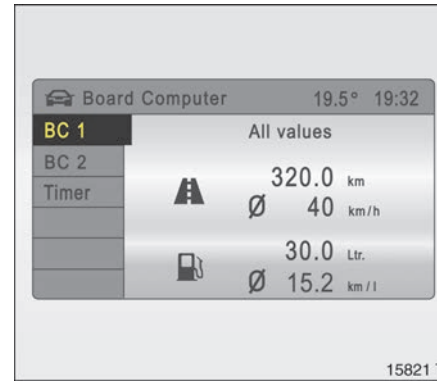
The trip computer provides information on driving data, which is continually registered and evaluated electronically.

There are two trip computers that register and evaluate data independently from one another.

To display trip computer driving data, press the **BC** button on the audio system and select the trip computer function in the display or press the left adjuster wheel on the steering wheel.

The **Board Computer** menu is opened and 'Range' and 'Instantaneous consumption' are displayed.

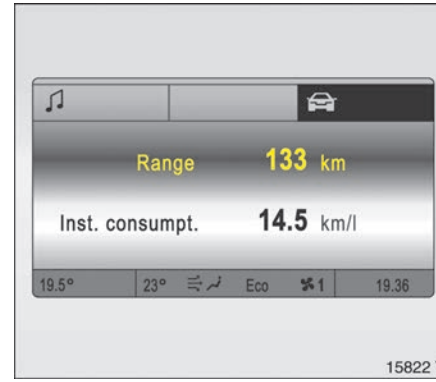
Some of the functions appear on the display in an abbreviated form.



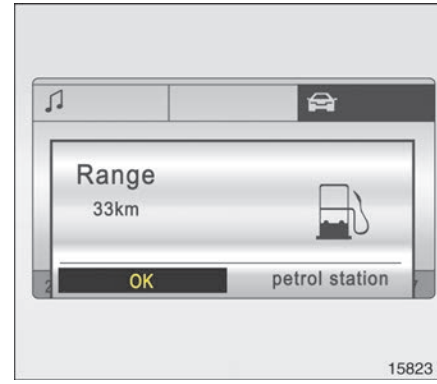
Trip computer – range

Range is calculated from the current fuel tank content and instantaneous consumption. The display shows average values.

After refuelling, the vehicle updates the range automatically after a brief delay.



If the fuel in the tank will allow less than 50 km, a warning **Range** appears on the display.



MULTI-INFORMATION DISPLAY cont.*

Trip computer – instantaneous consumption

The display changes depending on speed:

Display in l/h below 13 km/h.

Display in l/100 km above 13 km/h.

Trip computer – distance travelled

Displays the number of kilometres driven. Measurement can be restarted at any time.

Trip computer – average speed

Average speed calculation. Measurement can be restarted at any time. Time spent in the journey with the ignition off is not included in the calculation.

Trip computer – effective consumption

Displays the amount of fuel consumed. Measurement can be reset at any time.

Trip computer – average consumption

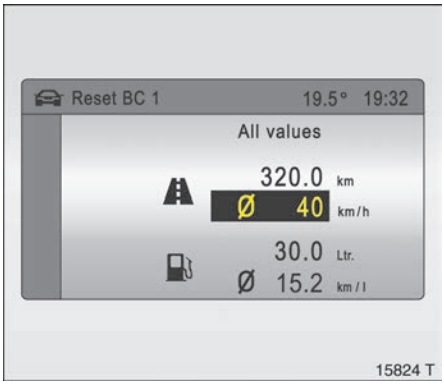
Calculation of average consumption. Measurement can be restarted at any time.

Resetting trip computer information

The following trip computer information can be reset (restart measurements):

- Distance travelled.
- Average speed.
- Effective consumption.
- Average consumption.

- Select **BC1** or **BC2** in the trip computer menu.
- Select the desired trip computer information.

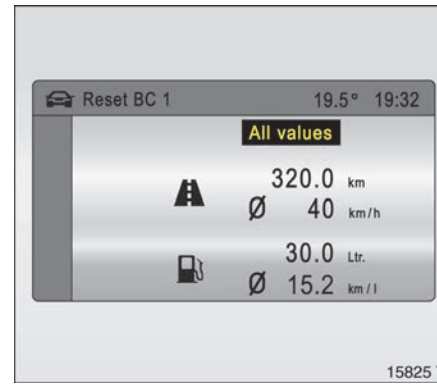


MULTI-INFORMATION DISPLAY cont.*

The value for the selected function will be reset and recalculated.

Select **All values** to reset all information in the trip computer.

After resetting, '---' is displayed with the trip computer information selected. The recalculated values are displayed after a brief delay.



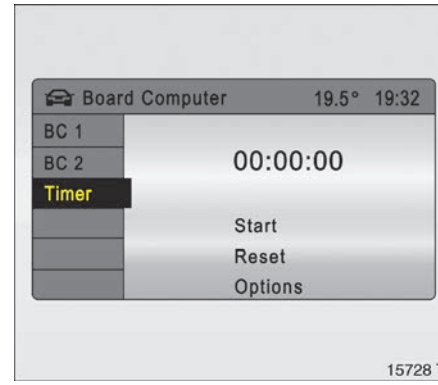
Stop watch

Select **Timer** from the **Board Computer** menu.

The Timer menu will be displayed.

Start the stop watch by selecting **Start**.

Reset the stop watch by selecting **Reset**.



Stop watch options

Different stop watch options can be accessed in the **Options** menu.

Driving time excluding stationary time:
The time the vehicle is in motion is recorded. Stationary time is not recorded.

Driving time including stationary time:
The time the vehicle is in motion is recorded. The time the vehicle is stationary with the key in the ignition is included.

Travel time:
The time between manual activation via **Start** and deactivation via **Reset** is recorded.

MULTI-INFORMATION DISPLAY cont.*

Outside temperature

A fall in outside temperature is indicated immediately and a rise in temperature after a time delay.

A warning message is shown in the display as a warning for icy road surfaces. There is no message below -5 °C.

WARNING
The road surface may already be icy even though the display indicates a few degrees above 0 °C.

Check control

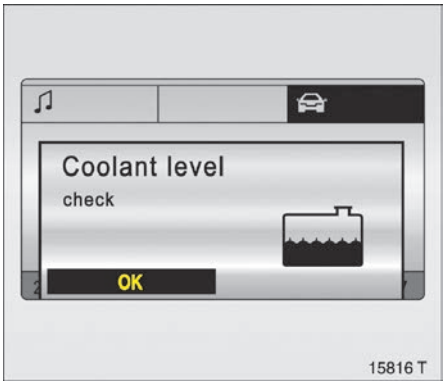
Check control monitors several fluid levels, the remote control batteries, and important external lights, including cables and fuses. When towing, trailer lighting is also monitored.

Once the ignition has been switched on, all check control functions are automatically verified.

Warning messages appear on the display. If there are several warning messages, they are displayed one after the other.

Some of the warning messages appear on the display in abbreviated form.

If check control issues a warning message, the display is blocked from other functions. Acknowledge the message by pressing the multi-function button. If there are several warning messages, acknowledge them one at a time.



***MULTI-INFORMATION DISPLAY* cont.**

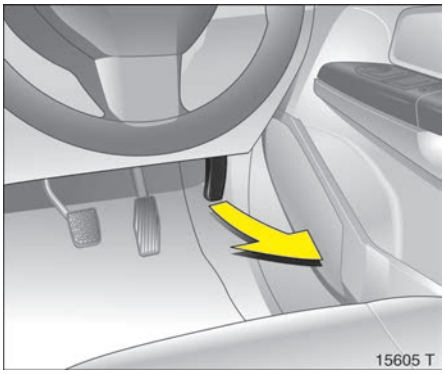
WARNING MESSAGES

Remote Control Battery check	The battery voltage of the remote control is too low. For battery replacement, refer to *Changing the remote control battery* in chapter 2.
Brake Light Switch check	The brake lights do not come on when the brake is applied. Have cause of fault remedied immediately. Consult your Holden Dealer.
Brake Light check right	There is a fault in the lighting system. The respective location of the fault is displayed as text. For bulb replacement, refer to *Bulb replacement* in chapter 6.
Brake Pad	The front disc brake pads are worn down to the minimum thickness. Consult your Holden Dealer to have the brake pads replaced.
Wash Fluid Level check	The windscreen washer fluid level is too low. Top up the washer fluid. Refer to *Washer fluid level* in chapter 7. **Note** The rear window wash system is deactivated if the washer fluid level is too low.
Coolant Level check	The engine coolant level is low. Check the coolant level immediately. Refer to *Engine coolant level* in chapter 7.
Interruption of power supply	Check control automatically, checks all functions after the battery has been reconnected or changed. Stored warning messages appear on the display one after the other.

BONNET RELEASE

The bonnet release is located below the dashboard on the driver's side.

From inside the vehicle, pull the bonnet release lever towards you. This allows the bonnet to release but the safety catch prevents it from opening.

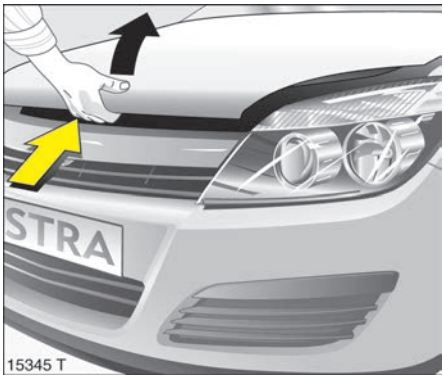


To open the bonnet completely, lift the safety catch upwards. The safety catch is located on the underside of the bonnet.

Note When the bonnet is opened, dirt or debris can slide down and obstruct the air intake. Ensure the air intake is clear before driving.

The bonnet is held open automatically. To close the bonnet, lower it slowly and allow it to fall into the lock under its own weight.

Check that the bonnet is locked correctly in position by pulling at the front edge. If it is not engaged, repeat the procedure.



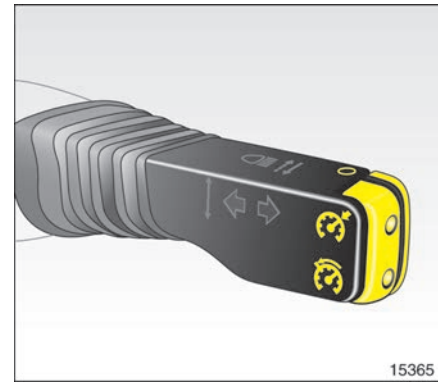
*CRUISE CONTROL**

The cruise control maintains the vehicle's speed without the driver having their foot on the accelerator pedal and operates at speeds over 30 km/h.

For safety reasons, the cruise control cannot be activated until the foot brake has been operated at least once.

The cruise control lever is on the right side of the steering column. The lever has two switches:

- The **O** (off) switch is at the top of the lever and is activated by pushing it in towards the steering column.
- The top part of the switch is used to adjust speed. It is a two-part switch, marked (increase) and (reduce).
- Press to resume the stored speed when the cruise control is activated. Refer to *Resuming the stored speed* further on in this chapter.



Cruise control indicator

The cruise control indicator illuminates for a few seconds when the ignition is switched on.

When driving, the cruise control indicator illuminates when cruise control is activated.

Switching on

Press the accelerator pedal until the vehicle is travelling at the desired speed (above 30 km/h) and then tap the button. Release the accelerator pedal; the cruise control is now maintaining speed.

To increase speed with the cruise control on

- Hold the button down or tap it repeatedly: The speed is increased continuously or in steps of 2 km/h without using the accelerator pedal.

  When the button is released, the selected speed is stored and maintained.

To decrease speed with the cruise control on

- Hold the button down or tap it repeatedly: The speed is reduced continuously or in steps of 2 km/h without using the accelerator pedal.

  When the button is released, the selected speed is stored and maintained.

CRUISE CONTROL cont.*

Resuming the stored speed

Tap the button when the vehicle's speed is above 30 km/h. The speed selected before the cruise control was switched off is resumed.

The stored speed is erased when the ignition is switched off.

The cruise control indicator illuminates for a few seconds when the ignition is switched on.

When driving, the cruise control indicator illuminates when cruise control is activated.

Switching off

Tap the **O** button: The cruise control is switched off and the vehicle slowly decelerates.

To continue driving, press the accelerator pedal.

The cruise control is also switched off when:

- Vehicle speed drops below 30 km/h.
- The brake pedal is pressed.
- The clutch pedal is pressed.
- The selector lever of vehicles with automatic transmissions is moved to **N**.

WARNING

- Do not use the cruise control when road or driving conditions could require varying speeds. A constant speed may not be practical in heavy or varying traffic, or on winding, slippery or rough roads.
- Remember that when the cruise control is maintaining your speed taking your foot off the accelerator pedal will not reduce speed. To quickly deactivate the cruise control you should press the brake or clutch pedal, or push the 'O' button.
- If your vehicle is fitted with an automatic transmission it is advisable to switch on the cruise control only when the transmission shift lever selector is in 'D'.
- The cruise control will not apply the vehicle's brakes. Therefore the vehicle may gain speed when going down steep hills.
- When climbing steep hills (particularly when towing) it is possible for the vehicle to lose speed. You may need to switch off the cruise control and instead use the accelerator pedal.

NOTES

CHAPTER 1B

Audio

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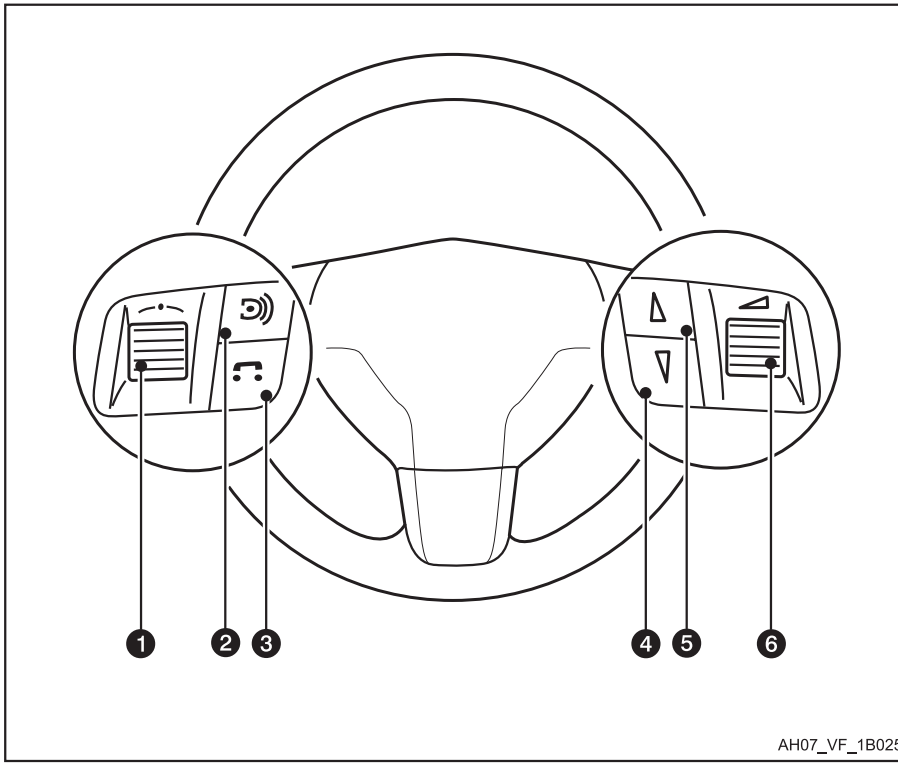
*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

STEERING WHEEL REMOTE CONTROLS

ALL MODELS



STEERING WHEEL REMOTE CONTROLS cont.

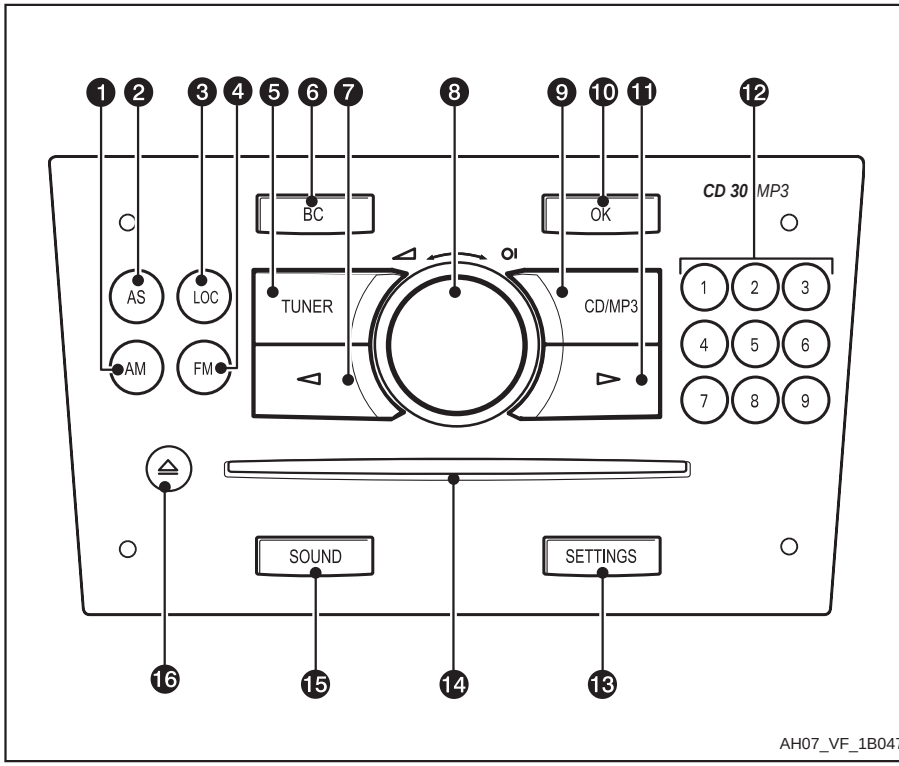
ALL MODELS

Depending on the vehicle type, on of two types of steering-wheel remote controls are installed.

❶	Turn: move cursor. Press: confirm selection.
❷	Radio: next stored station. CD: restart CD. MP3: next directory.
❸	Change between radio and CD mode.
❹	Radio: downward station search. CD/MP3: skip track backwards.
❺	Radio: upward station search. CD/MP3: skip track forward.
❻	Adjust the volume.

OVERVIEW

CD, SRI AND CDTI



OVERVIEW cont.

CD, SRI AND CDTI

Operating elements

❶	**AM**	Activate the AM or AM-AS level.
❷	**AS**	Activate/deactivate the AS level. Automatic station store.
❸	**LOC**	Adjust the sensitivity of the station search.
❹	**FM**	Activate the FM or FM-AS level.
❺	**TUNER**	Switch on radio mode; toggle between the FM and AM levels.
❻	**BC**	Board computer*[1)].
❼	◅	Radio: manual and automatic station search. CD/MP3: previous track fast track backward. Change menu values.
❽	◅ OI	Switch on and off: press. Volume adjustment: turn.
❾	**CD/MP3**	CD/MP3 mode. Changing the display type. Activate/deactivate random playback. MP3: display most recently played album.
❿	**OK**	Confirm selection. Page forward in settings menu.
⓫	▻	Radio: manual and automatic station search. CD/MP3: next track, track fast forward. Change menu values.
⓬	**1...9**	Station buttons.
⓭	**SETTINGS**	Adjust sound and system settings.
⓮		Insert CD.
⓯	**SOUND**	Enter sound settings. Page forward in Sound menu.
⓰	△	Eject CD.

[1)] Refer to page 1B-7.

GENERAL INFORMATION

General information about this manual

- The CD 30 MP3 brings you state-of-the-art car infotainment.
- For each waveband (FM, AM) the tuner has nine manual and nine automatic station memories.
- Using the localising function, the automatic station search is limited to the radio stations with the strongest reception.
- The integrated CD player lets you enjoy both audio and MP3 CDs.
- The audio system features speed dependent volume regulation. The volume regulation setting can be changed by the user.
- The digital sound processor offers you six preset sound settings to optimise the sound.
- The onboard computer* can be accessed via the audio system.
- An external source, e.g. a mobile phone, can be connected to the audio system.
- The well thought-out design of the operating elements and a large on/volume button allow comfortable control.
- To give you an overview of the varied functions of the audio system, refer to *Overview* previously in this chapter, which provides an overview of all operating elements.
- A description of the basic operating steps of the audio system is provided in *Operation* further on in this chapter.
- Detailed function descriptions about your audio system are provided in the *Radio* section and in *CD-/MP3-player*, further on in this chapter.
- If your audio system does not function as you expect, please refer to *Trouble-shooting* and *General notes* towards the end of this chapter. This will in many cases allow you to quickly fix a suspected fault.
- The *Glossary* at the end of this chapter explains technical terms.

Important information on operating the system and road safety

Use your audio system in such a way that you can always drive safely. If you have any doubts, stop the vehicle and operate the audio system while the vehicle is not moving.

Protection against theft

The audio system is equipped with an electronic safety system to prevent theft. The system only works in your car and is therefore of no value to thieves.

Display formats

Depending on the equipment in your vehicle, the display can have three different formats.

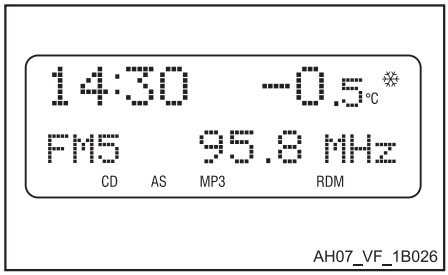
Some displays depend on the appliance settings and the way the vehicle is equipped and can therefore vary.

GENERAL INFORMATION cont.

Triple info display (TID)*

Displays:

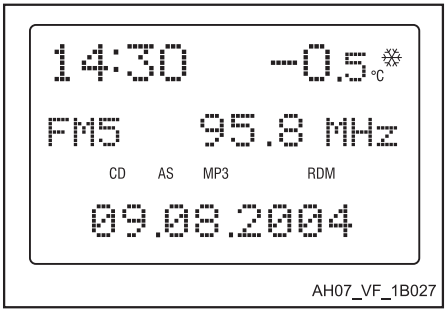
- Time.
- External temperature.
- The date or audio system, if it is switched on.



Board Info display (BID)*

Displays:

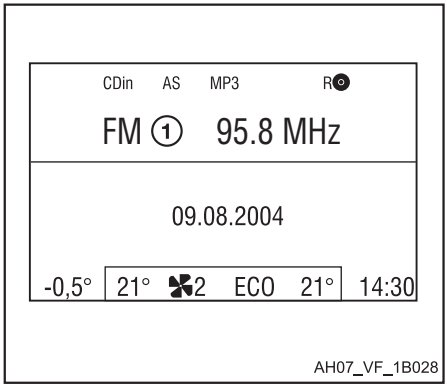
- Time.
- External temperature.
- The day of the week or audio system, if it is switched on.
- The date or information from the board computer or check control information*.



Multi Info Display (MID)*

Displays:

- The date or audio system, if it is switched on.
- The date or information from the board computer or check control information*.
- External temperature.
- Information from the climate control system*.
- Time.



OPERATING THE SYSTEM

Switching on and off

- Press button 8.
  - The audio system switches on/off.

Switching on and off with the ignition (automatic switch on)

If automatic switch on is activated, the audio system can also be switched on and off with the ignition.

This link between the radio and the ignition is activated at the factory, but can be deactivated.

- If automatic switch on is deactivated, the audio system can only be switched on with button 8 or by inserting a CD. It can only be switched off with button 8.
- If the audio system is switched off when the ignition is switched off, it can only be switched on with button 8 or by inserting a CD, irrespective of the automatic switch on setting.
- When the audio system is disconnected from the operating voltage and then reconnected, automatic switch on is always activated.

Activating/deactivating automatic switch on

TID, BID only[1)]:

- Press the **SETTINGS** button 13.
  - "Audio" is displayed.
- Press the left hand arrow button 7.
  - "System" is displayed.
- Press the **OK** button 10 until "Ign.Logic ON" or "Ign.Logic OFF" appears on the display, depending on the current setting.
- Select the status you want with the arrow buttons: 7 or 11.
  - With "Ign.Logic ON" the automatic switch on is activated.
  - With "Ign.Logic OFF" the automatic start is deactivated.
  - After around 5 seconds, "Audio" is displayed, followed by audio source.

If you press the **SETTINGS** button 13 again after you have made the changes, you will go back a level in the settings menu.

If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.

MID only[1)]:

- Press the **SETTINGS** button 13.
  - "Audio" and "System" are displayed.
- Press the left hand arrow button 7.
  - The system menu is displayed.
- Press the **OK** button 10.
  - The system menu is selected.
- Press the left hand arrow button 7 until, depending on the current settings, "☒ Ign.Logic" or "☐ Ign.Logic" is selected.
- Press the **OK** button 10 to change the current setting.

[1)] Refer to page 1B-7.

OPERATING THE SYSTEM cont.

- Switched-on functions are indicated by an activated control box ☒ in front of the menu item.
- Switched-off functions are indicated by a deactivated control box ☐ in front of the menu item.
- If you press the **SETTINGS** 13 button again after you have made the changes, you will go back a level in the settings menu.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.
- Press the left hand arrow button 7 until “Main” is displayed and confirm with the **OK** 10 button to leave the settings menu.
- Press the right hand arrow button 11 until “Return” is displayed and confirm with the **OK** 10 button to go back a level in the settings menu.

Automatic switch off

If you switch the audio system on with the ignition deactivated, it will automatically switch off after one hour.

Information displayed

The illuminated display shows information from the board computer*, the check control system*, the radio, the CD/MP3 player, the climate control system* and the date, the time and the external temperature. For information about the board computer, the check control system and the climate control system, refer to *Climate control* in chapter 1A.

When the audio system is switched on, the display lights up and the most recently selected audio source plays.

When the audio system is switched off and the ignition is on, the outside temperature, the time and date are displayed.

Volume

- Turn button 8.

When it is switched on the audio system plays at the most recently set volume, if this is below the maximum switch on level.

External audio sources are transmitted at a preset minimum volume, refer to *Sound settings* further on in this chapter.

The volume of the external audio sources and the radio and CD/MP3 player can be adjusted separately when active.

External source

You can connect an external source (e.g. a mobile phone or navigation system) to the audio system.

The external source is automatically connected with a control signal from the appliance, even if the audio system is switched off. “Extern In” is displayed if this is the case.

We recommend that you have extra appliances installed by an Holden Dealer.

OPERATING THE SYSTEM cont.

STEERING WHEEL REMOTE CONTROL SYSTEM

The following steering wheel controls are supplied for your convenience and to improve road safety:

Rotary control ❶ turn:

Board computer entry*, manual station search*.

TID only[1)]:

- Turn the rotary control ❶ up or down for a manual station search.

BID, MID only[1)]:

- Turning the rotary control ❶ up displays the previous board computer entry or the system carries out a manual station search.
- Turning the rotary control ❶ down displays the next board computer entry or the system carries out a manual station search.
- When installed together with a board computer* turning the rotary control does not offer a radio function.

Press the rotary control ❶:

- Board computer*.

TID only[1)]:

- No function.

BID only[1)]:

- Press the rotary control ❶ to display the board computer menu.
- Press the rotary control ❶ again to reset the current board computer value.
- Press the rotary control ❶ for at least two seconds to reset all the board computer values.

MID only[1)]:

- Press the rotary control ❶ to display the board computer menu.
- Press the rotary control ❶ again to select a board computer entry.
- Press the rotary control ❶ again to reset a board computer entry.

Button ❷:

Station memory, start CD, MP3 album.

- Radio: change to next stored station.
- Audio CD: Start CD playback.
- MP3 CD: change to the next album.

Button ❸:

Selecting an audio source

- If you press the ❸ button briefly, the audio system switches between radio and CD/MP3 playback.

1) Refer to page 1B-7.

OPERATING THE SYSTEM cont.

❹ ▽and ❺ △ buttons:

Search buttons

- Radio:

  Press lightly: search up/down.

  Press harder: continuous forward/ backward frequency scan; release the button to search for the next/previous station.

- CD/MP3:

  Press lightly: skip track forwards/ backwards

  Press harder: fast track forward/backward

Rotary control ❻:

Volume control

- Turn the rotary control ❻ up or down to increase or decrease the volume.
- Hold the rotary control ❻ to adjust the volume continuously.

MAIN DISPLAY

The main display is the display that appears after the audio system is switched on.

- This display varies with the equipment in the vehicle.
  The following information might be displayed:
  - time,
  - external temperature,
  - audio information,
  - board computer information* or date,
  - information from the climate control system*,
  - or check control system information*.

Board computer information*

Display of board computer information selected with the **BC** ❻ button. Refer to chapter 1A.

Audio Information

- The following information is shown on the display:
  - Current waveband or CD.
  - Current station frequency or CD track number or CD track name.
  - If the AS level is active, the display shows “AS”. Refer to *Radio, Automatic Storing (AS)* further on in this chapter.
  - If there is a CD in the system, the displays shows “CD” or “CDin”. Refer to *CD/MP3 player* further on in this chapter.
  - If the CD is an MP3 CD, the display shows “MP3” in addition to “CD” or “CDin”. Refer to *CD/MP3 player* further on in this chapter.
  - If the CD is playing in random mode the display shows “RDM” or the label R⓿. Refer to *CD/MP3 player, Random mode (Random)* further on in this chapter.

External temperature

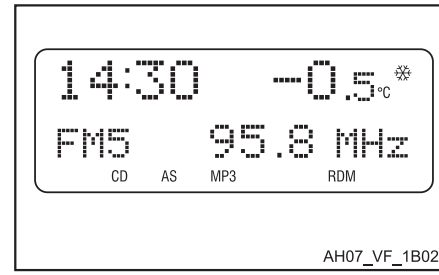
Display of the current outside temperature. Refer to chapter 1A.

Time

Display of the current time. Refer to chapter 1A.

Information from the climate control system*

Refer to *Climate control* in chapter 1A.



SOUND SETTINGS

Use the **SETTINGS** 13 button to select the following system and sound settings:

- Fader:
  Volume distribution
  front – rear
- Balance:
  Volume distribution
  left – right
- Sound:
  Choice of six preset sound settings
- SDVC:
  Speed-dependent volume control
- Ext. In Vol.:
  Volume of external audio source, e.g. mobile telephone
- On Volume: Maximum volume.

Fader

This function allows you to adjust the volume in the front and rear of the vehicle.

- Press the **SETTINGS** 13 button.
  - Depending on the type, the display shows “Audio” or the settings menu.
- Press the **OK** 10 button.
  - “Fader” and the value set are shown on the display.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - TID and BID[1)]: After around 5 seconds, “Audio” and then the audio source are displayed.
  - MID[1)]: After around 5 seconds, the settings menu is displayed.
- If you press the **SETTINGS** 13 button again after you have made the changes you will go back a level in the settings menu.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.

[1)] Refer to page 1B-7.

SOUND SETTINGS cont.

Balance

This function allows you to adjust the volume for the driver and the front passenger sides.

- Press the **SETTINGS** 13 button.
  - Depending on the type, the display shows “Audio” or the settings menu.
- Press the **OK** 10 button until “Balance” and the value set are shown on the display.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - TID and BID[1)]: After around 5 seconds, “Audio” and then the audio source are displayed.
  - MID[1)]: After around 5 seconds, the settings menu is displayed.
- If you press the **SETTINGS** 13 button again after you have made the changes you will go back a level in the settings menu.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.

Sound (settings)

Use this function to optimise the sound.

- Press the **SETTINGS** 13 button.
  - Depending on the type, the display shows “Audio” or the settings menu.
- Press the **OK** 10 button until “Sound” and the value set are shown on the display.
- Select a sound setting from the six available with the arrow buttons 7 or 11.

The available sound settings are “Rock”, “Disco”, “Classic”, “Jazz”, “Vocal” and “Off”.

  - The settings are applied automatically.
  - TID and BID[1)]: After around 5 seconds, “Audio” and then the audio source are displayed.
  - MID[1)]: After around 5 seconds, the settings menu is displayed.
- If you press the **SETTINGS** 13 button again after you have made the changes you will go back a level in the settings menu.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.

[1)] Refer to page 1B-7.

SOUND SETTINGS cont.

SDVC

To compensate for ambient and rolling noise, the audio system volume adjusts to the speed of the vehicle. You can use the SDVC function to adjust the speed dependent volume.

- Press the **SETTINGS** 13 button.
  - Depending on the type, the display shows “Audio” or the settings menu.
- Press the **OK** 10 button until “SDVC” is displayed.
- Adjust the value from 0 to 5 with the arrow buttons 7 or 11.
- The settings are applied automatically.
  - TID and BID[1)]: After around 5 seconds, “Audio” and then the audio source are displayed.
  - MID[1)]: After around 5 seconds, the settings menu is displayed.
- If you press the **SETTINGS** 13 button again after you have made the changes you will go back a level in the settings menu.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.

Ext. in vol.

This function allows you to set a minimum volume for external audio sources e.g. a mobile telephone.

- Press the **SETTINGS** 13 button.
  - Depending on the type, the display shows “Audio” or the settings menu.
- Press the **OK** 10 button until “Ext. In Vol.” appears on the display.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - TID and BID[1)]: After around 5 seconds, “Audio” and then the audio source are displayed.
  - MID[1)]: After around 5 seconds, the settings menu is displayed.
- If you press the **SETTINGS** 13 button again after you have made the changes you will go back a level in the settings menu.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.

On volume

Use this function to set the maximum volume.

- Press the **SETTINGS** 13 button.
  - Depending on the type, the display shows “Audio” or the settings menu.
- Press the **OK** 10 button until “On Volume” appears on the display.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - TID and BID[1)]: After around 5 seconds, “Audio” and then the audio source are displayed.
  - MID[1)]: After around 5 seconds, the settings menu is displayed.

[1)] Refer to page 1B-7.

SOUND SETTINGS cont.

- If you press the **SETTINGS** 13 button again after you have made the changes you will go back a level in the settings menu.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.
- The maximum switch on volume selected is used only if the volume prior to switching off the system was higher than the maximum switch on volume and the audio system has been off for at least five minutes with the ignition off.

Use the **SOUND** 15 button to make the following settings:

- Fader:
  Volume distribution.
  Front – rear.
- Balance:
  Volume distribution.
  Left – right.
- Bass:
  Enhance or reduce low tones.
- Treble:
  Enhance or reduce high tones.
- Current sound setting:
  6 different sound - settings.

Fader

Use this function to adjust the volume distribution in the front and rear of the vehicle.

- Press the **SOUND** 15 button
  - "Fader" appears on the display.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - After around 5 seconds, the most recent display reappears.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.
- Press the **SOUND** 15 button until the most recent display reappears.

Balance

This function allows you to adjust the volume for the driver and the front passenger sides.

- Press the **SOUND** 15 button until "Balance" is displayed.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - After around 5 seconds, the most recent display reappears.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.
- Press the **SOUND** 15 button until the most recent display reappears.

SOUND SETTINGS cont.

Bass

Use this function to set the low tones.

- Please note that any sound optimisation settings made previously will be deactivated.
- The bass settings apply to the current audio source and are stored separately for FM, AM and CD.
- Press the **SOUND** 15 button until “Bass” is displayed.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - After around 5 seconds, the most recent display reappears.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.
- Press the **SOUND** 15 button until the most recent display reappears.

Treble

Use this function to set the high tones.

- Please note that any sound optimisation settings made previously will be deactivated.
- The treble settings apply to the current audio source and are stored separately for FM, AM and CD.
- Press the **SOUND** 15 button until “Treble” is displayed.
- Adjust the value from -12 to +12 with the arrow buttons 7 or 11.
  - The settings are applied automatically.
  - After around 5 seconds, the most recent display reappears.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.
- Press the **SOUND** 15 button until the most recent display reappears.

Current sound setting

Use this function to optimise the sound.

- Press the **SOUND** 15 button until “Sound” and the value set are shown on the display.
- Select a sound setting from the six available with the arrow buttons 7 or 11.
- The available sound settings are “Rock”, “Disco”, “Classic”, “Jazz”, “Vocal” and “Off”.
  - The settings are applied automatically.
  - After around 5 seconds, the most recent display reappears.
- If after making the changes you press one of the function buttons, **FM** 4, **AM** 1, **TUNER** 5, **CD/MP3** 9 or **BC** 6, the function appears on the display.
- Press the **SOUND** 15 button once to retrieve the most recent display.

RADIO

Switch on the audio system

- Press the OI 8 button.
  - The infotainment indicator appears on the display.
  - The audio source most recently selected plays.

Radio mode

If you wish to listen to the radio while a CD is playing, proceed as specified below:

- Press either the **FM** 4, **AM** 1 or **TUNER** 5 button.
- Press the **FM** 4 or **AM** 1 button to display the station most recently tuned to in the waveband in question.
- Press the **TUNER** 5 button to display the station most recently tuned to.
  - The station most recently selected plays.

Selecting the waveband

The radio is on.

- Press either the **FM** 4 or **AM** 1 button to select the waveband.
- Pressing the AM button in the AM waveband or the FM button in the FM waveband has no effect.
  - If you press one of the buttons when the settings menu is active, the selected waveband is displayed. The settings menu remains active.
- Press the **TUNER** 5 button to switch to the other waveband.
  - The radio switches to the waveband corresponding to the status of the AS function.
- Press the AS 2 button briefly to activate/deactivate the AS level.
- The radio can select between the FM, FM-AS, AM and AM-AS wavebands.
- The current waveband and the station to which the radio was tuned most recently are displayed.
- Wave band selection:
  - FM = Ultra Shortwave (USW)
  - AM = Medium Wave (MW).

Station search

There are different types of station search available:

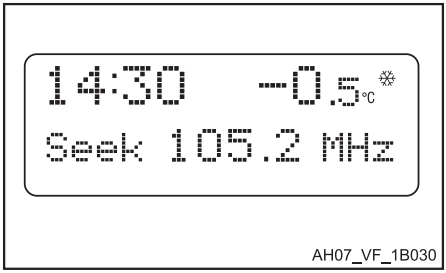
- Automatic station search, refer to the following page.
- Manual station search, refer to the following page.

RADIO cont.

Automatic station search

The radio searches for the next station for which there is reception.

- This function is only available in radio mode.
- If LOC is active, the radio searches for the station with the next strongest signal. If it is not active, the radio searches for the next station with a signal. For more information, refer to *LOCAL/DX function* on the following page.
- Press the arrow buttons 7 or 11 for approximately 1 second.
  - "Seek" is shown on the display before the frequency.
  - The radio is muted until a station is found.
- If the radio does not find a station, it automatically switches to a more sensitive search mode if the LOCAL/DX function is activated (LOC ON). If it still can't find a station, it tunes to the most recently active frequency again. For LOCAL/DX function, refer to the following page.

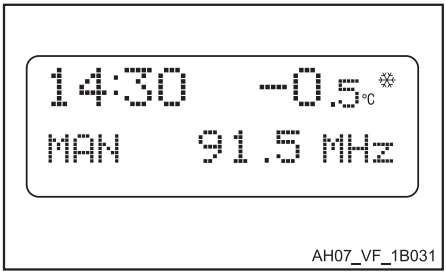


AH07_VF_1B030

Manual station search

Tuning in to a station with a known frequency: This function is only available in radio mode.

- Tap the arrow buttons 7 or 11 briefly.
  - The frequency is changed by one increment each time.
- Press the arrow buttons 7 or 11 for approximately 2 seconds.
  - "MAN" is shown on the display before the frequency.



AH07_VF_1B031

Coarse tuning

- Hold the arrow buttons 7 or 11 down until the system finds the frequency of the station you want.

Fine tuning

- Tap the arrow buttons 7 or 11 until the exact frequency of the station is shown in the display.
  - The frequency is moved one increment.

RADIO cont.

LOC (LOCAL/DX function)

The LOC function has two search levels with different sensitivities.

- Press the **LOC** ❸ key.
  - The current status, “LOC ON” or “LOC OFF”, is displayed.
- Press the **LOC** ❸ button again to switch on the LOC function.

The first search carried out is at the highest sensitivity level (LOCAL) to look for the station with the next strongest signal. If the radio cannot find a station with a strong signal, the second search is carried out at a less sensitive level (DX) to find stations with weak signals.

If the second search does not find a station, the most recently active frequency is restored.

If no further search is started within a minute, the highest sensitivity level (LOCAL) is automatically reset for the next search.

The LOCAL/DX function setting cannot be changed in CD/MP3 mode.

If the setting is “LOC OFF”, a low sensitivity search (DX) is carried out.

Station memory

Separate memory locations are available for each waveband:

- 9 x FM (USW),
- 9 x FM AS (automatically stored FM stations)
- 9 x AM (MW),
- 9 x AM AS (automatically stored MW stations)

- Select the storage locations with the station buttons 1 to 9 ⓬. Refer to *Tuning into a stored station* on the following page.

Activating/deactivating the AS level.

- Tap the **AS** ❷ button.
  - When the AS level is active, the display shows “AS”.
  - When the AS level is not active, the display does not show “AS”.

Storing stations manually

To store stations manually, proceed as specified below:

- Select the waveband and select the station.
- Hold down the station button ⓬ for the storage location to which you want to save the station for approximately 2 seconds.
  - The radio briefly mutes and displays the station previously stored in the memory location.
  - Then the station to which the radio is currently tuned in plays again and appears on the display.
  - The station is stored in the memory location selected.

Stations can also be stored manually in the AS level.

RADIO cont.

Automatic Storing (AS)

Autostore is possible in the FM and AM wavebands. These stations are stored in a separate AS memory. To automatically store stations, proceed as specified below:

- Select the waveband required.
- Hold down the AS ❷ button till you hear the confirmation signal.
  - The radio changes over to the AS level of the selected wave band (FM-AS or AM-AS).
  - Automatic station storage starts.

The 9 stations with the strongest signal are stored on the station buttons 1 to 9 ⓬ for the waveband selected.

Storing new stations with AS

If the radio moves out of range of stored stations during a journey, you can store new ones.

Tuning into a stored station

- Select the waveband required.
- Hold down the AS ❷ button to go to the AS level.
- Select the storage location with the station buttons 1 to 9 ⓬ (storage locations 1 to 9).
  - The station you selected plays.

CD/MP3 PLAYER

This device plays standard 12 cm CDs.

WARNING

- Shape CDs are not suitable for playing. No liability is accepted for damage to the CD drive caused by unsuitable CDs.
- Do not insert DVDs into the CD drive.

Audio CDs are being manufactured with mechanisms to protect them from unauthorised reproduction. However, these measures do not comply with the audio CD specification (Red Book) according to which all appliances for playing audio CDs have been and are being developed. Your appliance can play back CDs with the types of copy protection known at the time the player is sold. However, this is not a guarantee that it will be able to play back CDs with new variants of the copy protection mechanisms in the future.

You can also play CD-Rs with MP3 music files on the audio system.

Preparing the MP3 CD

A combination of CD burner, burner software, blank CD and ambient temperature can cause problems with playing CDs. If you encounter problems with self-recorded CDs, change the make or colour of the blank CDs. Best results are achieved with blank CDs with 74 minute playback times.

The CD format must be ISO 9660 Level 1, Level 2 or JOLIET. No other formats will play reliably.

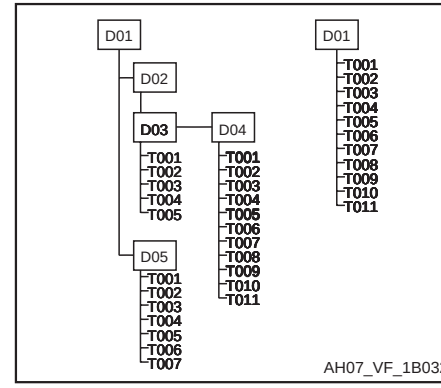
You can create a maximum of 99 albums on one MP3-CD for playing on the audio system. The albums can be selected individually with the audio system.

A total of 367 tracks can be stored on one CD. Any more tracks cannot be played.

As some burner software can cause discrepancies in the numbering, you should record either only sub-albums with tracks (refer to illustration on the left) or tracks only (refer to illustration on the right) in the root album D01.

Each album can be named on a PC. The name of the album can be displayed in the Infotainment display area. Name your albums and tracks as specified in your CD recording software. For information on this please refer to the software manual.

- You should not use umlauts or special characters in the names of your tracks and directories.



CD/MP3 PLAYER cont.

If you wish to have your files in the correct order, use a recording software which arranges the files in alphanumerical order. Should your software not feature this, you can also sort the files manually. To do this, you need to enter a number in front of the file name, e.g. “001”, “002” and so on. The leading zeros are required for correct numbering.

Each track can be given a name (ID3 tag). The name of a track can also be displayed.

Use a maximum bit rate of 256 kbit/s when creating the MP3 files from the audio files.

The MP3 files used in the audio system must have the “.mp3” extension.

- Do not try to play back non-MP3 files to which the “.mp3” file extension has been affixed, as they will be detected and skipped.

Switch on the audio system

- Press the OI 8 button.
  - The audio symbol is displayed.
  - The audio source most recently selected plays.

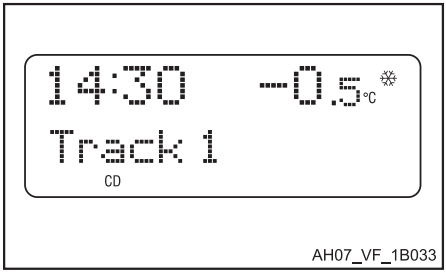
CD mode

Playing a CD when the CD is not yet in the appliance):

- The appliance is turned off or in radio mode.

- Insert the CD (label side up) in the CD slot 14.
  - The device pulls the CD in automatically.

  Note The CD drawer should not be obstructed or supported.
  - “Read CD” and the “CD” symbol are displayed, followed by the number of tracks.
  - As soon as the first track starts to play, the display shows track 1 and the playing time.
  - With MP3 CDs the “MP3” symbol lights up on the display and the first album name is displayed.
  - Information about the track (title, artist) are displayed as soon as the first track starts to play.



Playing a CD already inserted in the system

If the CD is already in the CD slot, start playback as specified below:

- The appliance is in radio mode.

- Press the CD/MP3 9 button.
  - The CD track last played is displayed.
  - The CD track last played starts to play.

CD/MP3 PLAYER cont.

Changing the display type

You can choose between several display types.

- Press the CD/MP3 9 button twice.
  - "CD info" appears on the display.
- Press the arrow buttons 7 or 11 to select the display type.
  - After around 5 seconds, the display type selected is applied.
  - Depending on the kind of CD (audio CD with or without text, MP3 CD with or without ID3 tags), the following may be displayed:

Audio CD with CD text:

- Track number and playing time.

Audio CD with CD text*:

- Track title.
- Artist name.
- Track number and playing time.
- CD name.

MP3 CD without ID3 tags*:

- File name.
- Track number and playing time.
- Album name.

MP3 CD with ID3 tags*:

- Track title.
- Artist name.
- Track number and playing time.
- Album name.

Selecting a track

If you wish to select a track while a CD is playing, proceed as specified below:

- Tap the arrow buttons 7 or 11 until the CD title you want appears on the display.
  - The CD track starts to play.

Fast forward/backward search

To find a specific section on a CD, proceed as follows:

  - You're listening to a track.
- Hold the arrow buttons 7 or 11 down until you get to the section you want to hear.
  - During fast forward/backward scan, the CD plays at a higher speed and reduced volume.
  - MP3: with fast search backward, the search stops at the beginning of the current track.

CD/MP3 PLAYER cont.

Selecting an MP3 album

If your MP3 CD contains several albums you can select the album you want as follows:

- Press the CD/MP3 9 button.
  - The CD track last played is displayed.
- Tap the arrow buttons 7 or 11 until the album you want appears on the display.
  - The first track of the album is displayed.
  - The first track starts.
  - All the directories which do not contain MP3 files are automatically skipped. If, for example, you are listening to tracks from album D01 and select the next album with the arrow buttons 11, album D02 is skipped and D03 is played. The display will automatically change from D01 to D03.

Random mode (random)

With this function, the CD/MP3 player plays the tracks on the current CD in random order.

- Press the CD/MP3 9 button three times.
  - The current random function setting is displayed.
- Select a setting with the arrow buttons 7 or 11.

The following settings are available for audio CDs:

- Random on:

  Activate random mode.
- Random off:

  Deactivate random mode.

The following settings are available for MP3 CDs:

- Random album:

  Random playback of the tracks of an album.
- Random CD:

  Random playback of the tracks on a CD.
- Random off:

  Deactivate random mode.
  - If the random function is activated, either “RDM” or the label R● will be displayed.

Eject CD

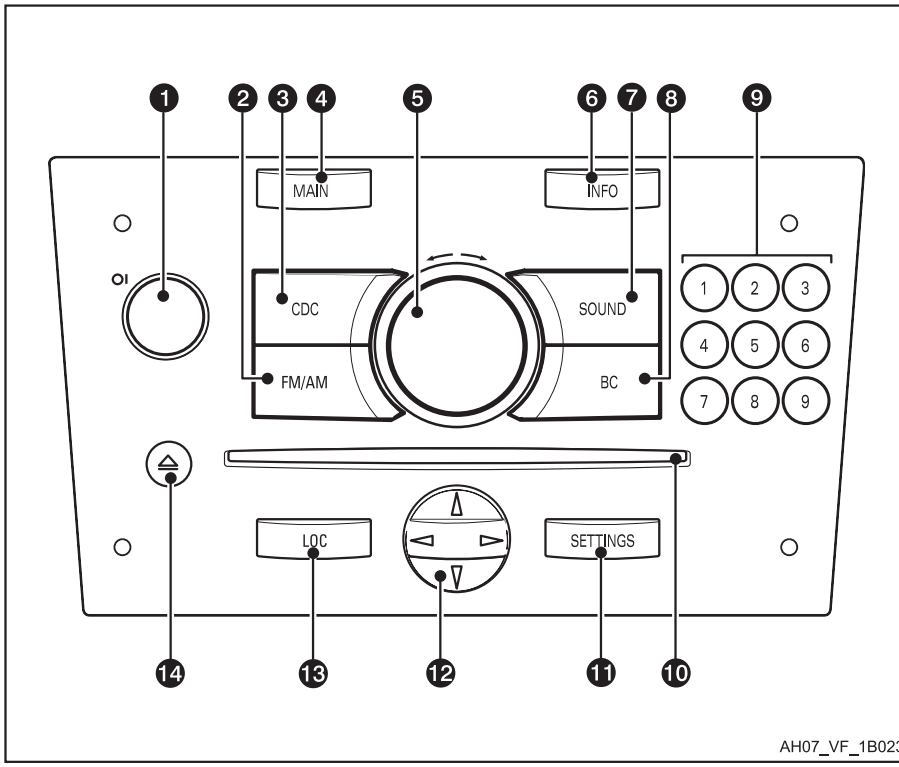
- Press the 16 button.
  - “Eject CD” is displayed.
  - The station most recently selected plays.

A CD can be ejected even if the appliance is turned off. The appliance switches off after the CD has been removed.

If the CD is not removed, it is automatically re-inserted after around ten seconds.

OVERVIEW

CDX, SRI TURBO AND TWINTOP



OVERVIEW cont.

CDX, SRI TURBO AND TWINTOP

1 OI	On/off: press briefly.
	Audio source muting: press longer.
	Volume adjustment: turn clockwise to increase volume and anti-clockwise to decrease volume.
2 **FM/AM**	Radio mode/switch between FM and AM.
3 **CDC**	CD changer programme selection.
4 **MAIN**	Main menu.
5 ← →	Select function: turn to left or right.
	Confirm function: press.
6 **INFO**	Information page.
7 **SOUND**	Sound function programme selection.
8 **BC**	Onboard computer*[1)].
9 **1...9**	Number keys, preset station buttons.
10 **–**	Insert CD.
11 **SETTINGS**	Context-depending settings.
12 ⊕	Rocker switch forward/backward.
	Rocker switch up/down.
13 **LOC**	Localisation.
14 ⏏	CD-changer menu.

GENERAL INFORMATION

General notes on this instruction manual

- The CDC 40 OPERA offers you state-of-the art car infotainment.
- The tuner has nine manual and nine automatic station memories for each waveband (FM, AM).
- Using the localising function, the automatic station search is limited to the radio stations with the strongest reception.
- The integrated CD changer holds up to six CDs.
- The digital sound processor offers you five preset sound settings for sound optimisation.
- The onboard computer* can be accessed from the audio system.
- An external source, e.g. a mobile phone, can be connected to the audio system.
- The well thought-out design of the operating elements, clearly structured menus on the large display and a large multifunction knob allow comfortable control.
- To give you an overview of the varied functions of the audio system, refer to *Overview* previously in this chapter, which provides an overview of all operating elements.
- A description of the basic operating steps of the audio system is provided in *Operation* further on in this chapter.
- Detailed function descriptions about your audio system are provided in the *Radio* section and in *CD changer*, further on in this chapter.
- A directory of menu items helps you understand the display.
- If your audio system does not function as you expect, please refer to *Trouble-shooting* and *General notes* towards the end of this chapter. This will in many cases allow you to quickly fix a suspected fault.
- The *Glossary* at the end of this chapter explains technical terms.

Important note on operation and traffic safety

When using your audio system be sure you can always drive your vehicle safely. In case of doubt, pull over before you operate the audio system.

Theft protection

The audio system is equipped with an electronic safety system to prevent theft. Therefore, it only works in your vehicle and is worthless to thieves.

OPERATION

Switching on/off

- Press the power on/off button ❶.
  - The audio system is switched on/off.

Switching on and off with the ignition (ignition logic)

When the audio system is switched on, it can be switched off and on again via the ignition.

The factory setting is that the coupling between radio and ignition is activated, but you may deactivate it.

- If the automatic start is deactivated, the audio system can only be switched on/off the power on/off button ❶.
- The automatic start is always activated after the audio system has been disconnected from the operating voltage and is re-connected.

Activate/deactivate ignition logic

  - You are in the main menu.
- Press button **SETTINGS** ⓫.
  - The system settings menu is displayed.
- Activate/deactivate the **Ignition logic** checkbox.

☒ Activated. On the right side of the display the message **Turn on/off Radio via Ignition logic**. is displayed.

☐ Deactivated. On the right side of the display the message **Turn on Radio via ON/OFF button only**. is displayed.

Automatic switch off

If you switch the audio system on with the ignition deactivated, it will automatically switch off after one hour.

Indications on the display

The illuminated display indicates information on the onboard computer*, the check control*, the radio, the CD changer, the air-conditioning system*, as well as date, time and outside temperature. For information on the onboard computer, check control and air-conditioning system, refer to chapter 1A.

The display contrast can be regulated via the system settings menu. Refer to chapter 1A.

When the audio system is switched on, the main menu appears after a short time. Refer to *Main menu* further on in this chapter.

When the audio system is switched off and the ignition is on, outside temperature, time and date are indicated.

OPERATION cont.

Volume

- Turn button 1.
  - The audio system plays at the volume last adjusted, provided the volume was below the maximum start-up volume.

The speed dependent volume, the maximum start-up volume and the volume of external audio sources can be adjusted separately. Refer to *Volumes* further on in this chapter.

Muting

Activating the muting function:

- Keep button 1 pressed until **Mute volume** is displayed.
  - The audio system is muted.

Deactivating the muting function:

- Press button 1.

  or
- Turn knob 1.
  - The audio source last set is displayed.
  - The audio source last set is played.

External source

An external source, e.g. a mobile phone or a navigation system, can be connected to the audio system.

The external source is automatically switched through by means of a control signal from the appliance connected, even if the audio system is switched off.

- **External In** is displayed.

We recommend having appliances installed by your Holden Dealer.

Menu concept

The audio systems menu structure features various types of menu pages:

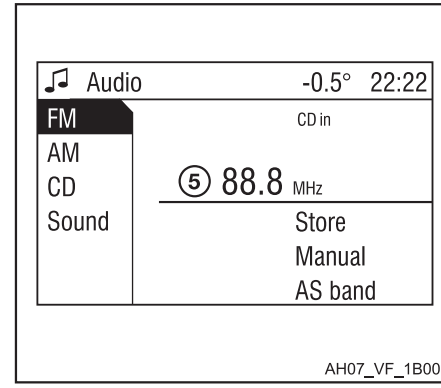
- Passing pages.
- Stay pages.
- Settings pages.

The various pages have different functions:

Passing pages:

Passing pages have a selection menu on the left side of the screen showing a preview of the menu items. Passing pages lead you to stay or settings pages.

The audio menu is an example of a passing page.



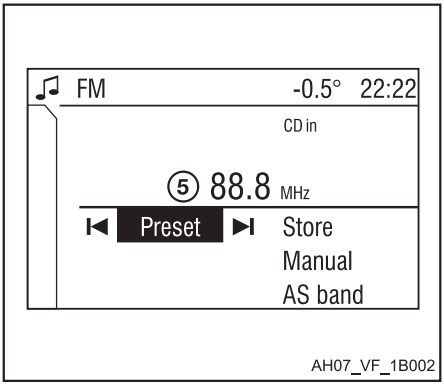
OPERATION cont.

Stay pages:

Stay pages are menu pages where you stay, e.g. if you're listening to the radio or a CD.

Stay pages also contain menu items which can be selected and lead you to other stay or settings pages.

The tuner menu is an example of a stay page.



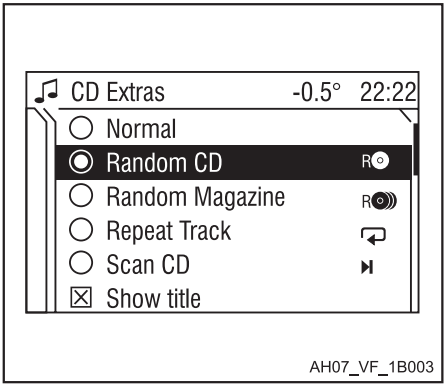
Settings pages:

Settings pages are menu pages on which you can make settings, e.g. sound settings etc.

The CD Extras menu is an example of a setting page.

Menu levels:

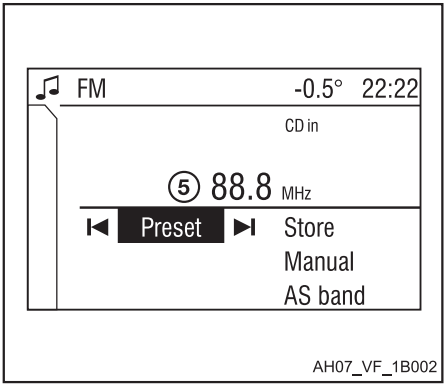
The menus of the audio systems are structured in levels. The current menu level is indicated by vertical lines at the edge of the screen (e.g. Main display = no line, Stay page Radio = 1 line, etc.).



Selecting from a menu

Menu items are selected by using a cursor moved by turning the multifunction knob. The cursor has the shape of a bar. It indicates which menu item is highlighted.

- Turn the multifunction knob 5 until the desired menu item is highlighted.
- Press the multifunction knob 5.
  - The associated function is performed or another menu is displayed.



OPERATION cont.

In the following audio system instructions, the actions described previously are summarised into the following action:

- Select the menu item.
- In some menus, settings are made by turning the multifunction knob.
- Active functions are identified by a checked checkbox (☒) or a selected option field (⊙) in front of the menu item.
- Deactivated functions are identified by an unchecked checkbox (☐) or an empty option field (○) in front of the menu item.

Selecting from a preset station list

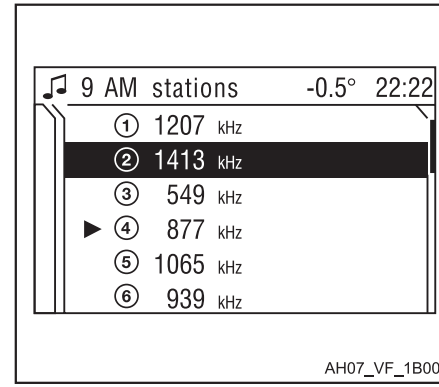
Some menus are displayed in the form of lists.

- Turn the multifunction knob ❺.
  - The cursor moves up or down.
- Press the multifunction knob ❺.
  - Your selection is confirmed.

In the following audio system instructions, the actions described above are summarised into the following action:

- Select the desired list item.

If moving the cursor to the top or bottom area of the display, other list items appear. A scroll-bar on the right side of the display indicates the current cursor position in the list.



  - The list item last selected is in some lists marked with an arrow.
  - The name of the list and the number of items in it are indicated in the title bar of some lists.

Overlay menus

In some cases, additional notes and information on the audio system or other vehicle components appear on the display.

The current menu is overlayed with the information box.

Some overlays need to be acknowledged, others disappear automatically after a short while.

OPERATION cont.

Selecting the main menu

To access the main menu, proceed as follows:

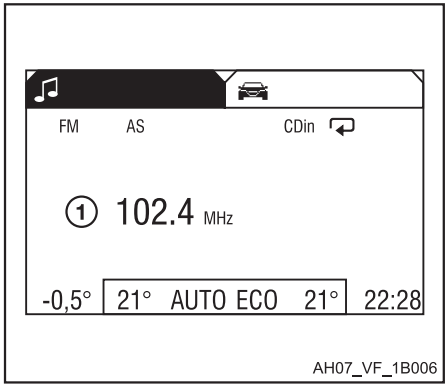
- Turn the multifunction knob ❺ to the right until menu item **Main** appears.
- Press the multifunction knob ❺.
  - The main menu is displayed.

  or

Repeat the following steps until the main menu is displayed:

- Turn the multifunction knob ❺ to the left until menu item **Return** is displayed on the title bar.
- Press the multifunction knob ❺.

  or
- Press button **MAIN** ❹.
  - The main menu is displayed.



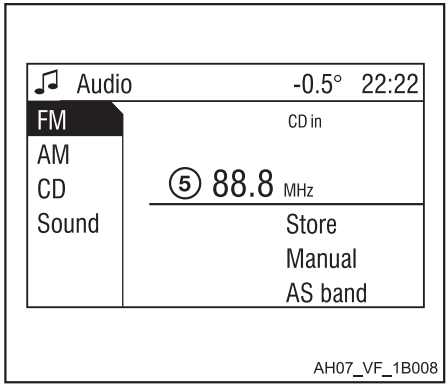
After leaving a sub-menu by pressing button **MAIN** ❹, you may get directly to this sub-menu the next time you press the according function button.

Selecting the audio menu

In the audio menu, you can change between FM, AM and the CD changer and access the sound menu.

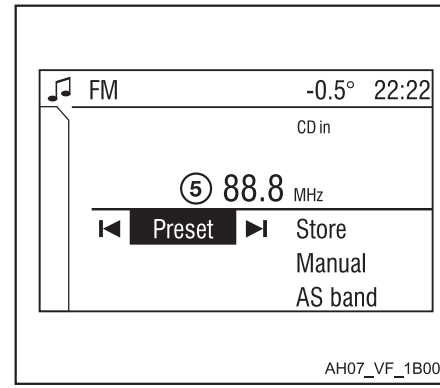
To select the audio menu, proceed as follows:

- You are in the tuner, CD or sound menu.
- Turn the multifunction knob ❺ to the left until menu item **Return** is displayed on the title bar.
- Press the multifunction knob ❺.
  - The audio menu is displayed.



OPERATION cont.

Selecting the tuner menu



- You are in the audio menu.

• Select menu item **FM** or **AM**.
  - The tuner menu is displayed.

    or
  - You are in the main menu and are listening to the radio.

• Press the multifunction knob **5**.
  - The tuner menu or the last selected sub-menu is displayed.

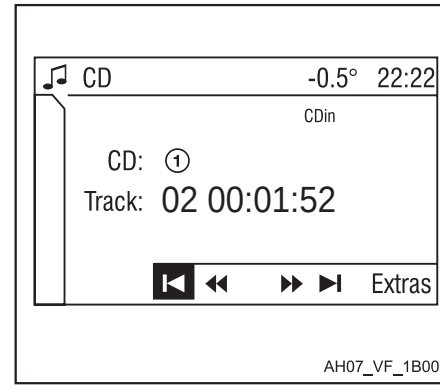
    or

• Press button **FM/AM** **2**.
  - The tuner menu or the last selected sub-menu is displayed.

After you leave a sub-menu by pressing button **FM/AM** **2**, you go directly to this sub-menu the next time you press the according function button.

If you are in the tuner menu and press button **FM/AM** **2**, the radio toggles between the FM and AM wave bands.

Selecting the CD menu



- You are in the audio menu.

• Select menu item **CD**.
  - The CD menu is displayed.
  - If no CD is inserted, the CD-Changer menu appears. Refer to *Inserting a CD* further on in this chapter.

    or
  - You are in the main menu and are listening to a track.

• Press the multifunction knob **5**.
  - The CD menu or the last selected submenu is displayed.

    or

• Press button **CDC** **3**.
  - The CD menu or the last selected submenu is displayed.

If no CD is inserted, the CD-Changer menu appears. Refer to *Inserting a CD* further on in this chapter.

After you leave a sub-menu by pressing button **CDC** **3**, you may get directly to this sub-menu the next time you press the according function button.

OPERATION cont.

Selecting the sound menu

- You are in the audio menu.

- Select menu item **Sound**.
  - The sound menu is displayed.

  or

- Press button **SOUND** 7.
  - The sound menu or the last selected sub-menu is displayed.

After leaving a sub-menu (by pressing button **SOUND** 7), you may get directly to this sub-menu the next time you press the according function button.

Phone menu*

If a phone* is connected to the audio system, a special menu facilitates the operation.

In the event of an incoming call or by pressing any key on the phone, the phone menu is displayed and the audio system is muted. Refer to the manual for your phone.

Leaving a menu

There are two ways to leave a menu:

- Using the multifunction knob.
- Using the function buttons.

After leaving a sub-menu with a function button, you may get directly to this sub-menu the next time you press the according function button.

Leaving a menu with the multifunction knob

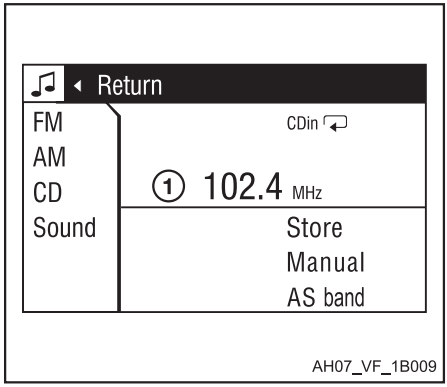
- Turn the multifunction knob 5 to the left until menu item **Return** is displayed on the title bar.
- Press the multifunction knob 5.
  - The next higher menu is displayed.

This option is not available in the main menu and in some input menus.

or

- Turn the multifunction knob 5 to the right until menu item **Main** is displayed on the bottom bar.
- Press the multifunction knob 5.
  - The main menu is displayed.

This option is not available in lists, input menus and the main menu.



OPERATION cont.

Leaving a menu with the function buttons

You can exit a menu by using the function buttons.

Button **CDC**:

- Press button **CDC** 3.
  - The CD menu or the last selected submenu is displayed.

If no CD is inserted, the CD-Changer menu appears. Refer to *Inserting a CD* previously in this chapter.

Button **FM/AM**:

- Press button **FM/AM** 2.
  - The tuner menu or the last selected sub-menu is displayed.

Button **SETTINGS**:

Menus opened via the **SETTINGS** 11 button can also be left via that button.

- Press button **SETTINGS** 11.
  - The corresponding menu is displayed.

Button **SOUND**:

- Press button **SOUND** 7.
  - The sound menu or the last selected sub-menu is displayed.

Button **MAIN**:

- Press button **MAIN** 4.
  - The main menu is displayed.

STEERING WHEEL REMOTE CONTROLS

The following steering-wheel buttons are available to increase driving safety and to facilitate operation:

Setting wheel ❶

The setting wheel ❶ provides the same functions as the multifunction knob.

Button ❷

Station memory, CD

- If pressing button ❷, then the audio system changes to the next stored station or the next CD.

Button ❸

Audio source selection:

- If pressing button ❸, the audio system changes between radio and CD mode.

Buttons ❹ and ❺

Search buttons:

- Radio: Search upward/downward.
- CD: Skip track forward/backward.

Setting wheel ❻

Volume control:

- Turn the setting wheel ❻ up or down to increase or reduce the volume.
- Hold the setting wheel ❻ to continuously change the volume.

MAIN MENU

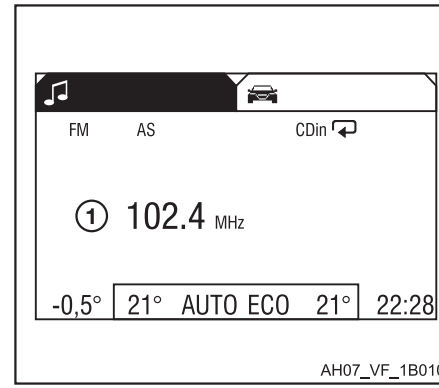
The main menu is the display providing you with information only. You can select between the two main menu views audio and onboard computer*.

Depending on the vehicle equipment, the display can be different.

To access the main menu, proceed as follows:

- Turn the multifunction knob 5 to the right until **Main** is displayed on the bottom bar.
- Press the multifunction knob 5.
  - The main menu is displayed.

This option is not available in lists and input menus.



or

Repeat the following steps until the main menu is displayed:

- Turn the multifunction knob 5 to the left until menu item **Return** is displayed on the title bar.
- Press the multifunction knob 5.

This option is not available in some input menus.

or

- Press button **MAIN** 4.
  - The main menu is displayed.

After leaving a sub-menu by pressing button **MAIN** 4, you may get directly to this sub-menu the next time you press the according function button.

The following information can be displayed:

- Audio information.
- Outside temperature.
- Onboard computer information*.
- Check control* messages.
- Information on the air-conditioning system*.
- Time.

Audio information

Display of the following audio information:

- Current station memory location or CD.
- Current station frequency or CD track.
- **AS** is indicated if the AS band is active. Refer to *Autostore (AS)* further on in this chapter.
- **CD in** is indicated if one or several CDs are inserted. Refer to *CD Changer* further on in this chapter.

MAIN MENU cont.

Outside temperature

Indication of the current outside temperature. Refer to *Information displays* in chapter 1A.

Onboard computer information*

Display of the onboard computer information selected with the **BC** ❽ button. Refer to *Information displays* in chapter 1A.

Check control*

Refer to *Information displays* in chapter 1A.

Information on the air-conditioning system*

Refer to *Air-conditioning* in chapter 1A.

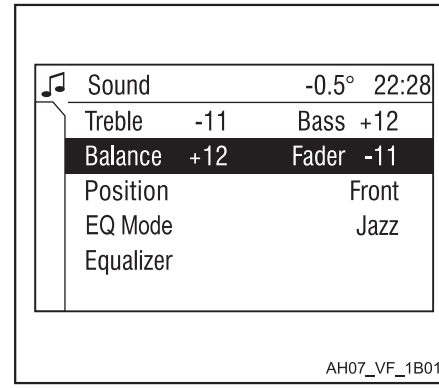
Time

For clock time adjustment, refer to *Information displays* in chapter 1A.

SOUND SETTINGS

The following menu items are available in the sound menu which can be accessed via button **SOUND** 7:

- Treble - Bass:
  Enhance or attenuate high and low frequencies.
- Balance - Fader*:
  Volume distribution left-right and front rear.
  Subwoofer*:
  Separate bass box.
- Position:
  Surround sound with preset values.
- EQ Mode:
  Selection of preset sound settings.
- Equalizer:
  Settings of seven sound frequencies.



Treble

Use this function to adjust high frequencies.

The treble settings apply to the currently selected audio source and are stored independently for FM, AM and CD changer.

- Select menu item **Treble - Bass** in the sound menu, button **SOUND** 7.
  - The Treble - Bass menu is displayed.
- Select menu item **Treble**.
  - The Treble slider is marked.
- Turn the multifunction knob 5 until the desired value is adjusted.
- Press the multifunction knob 5.

Bass

Use this function to adjust low frequencies.

The bass settings apply to the currently selected audio source and are stored independently for FM, AM and CD changer.

- Select menu item **Treble - Bass** in the sound menu, button **SOUND** 7.
  - The Treble - Bass menu is displayed.
- Select menu item **Bass**.
  - The **Bass** slider is marked.
- Turn the multifunction knob 5 until the desired value is adjusted.
- Press the multifunction knob 5.

The Bass is automatically adjusted to the driving speed to compensate for road and ambient noise. The setting cannot be changed.

SOUND SETTINGS cont.

Balance

Use this function to adjust left/right volume distribution.

- Select menu item **Balance - Fader** in the sound menu, button **SOUND** 7.
  - The Fader - Balance menu is displayed.
- Select menu item **Balance**.
  - The Balance slider is marked.
- Turn the multifunction knob 5 until the desired value is adjusted.
- Press the multifunction knob 5.

Fader*

Use this function to adjust front/rear volume distribution.

- Select menu item **Balance - Fader** in the sound menu, button **SOUND** 7.
  - The Fader - Balance menu is displayed.
- Select menu item **Fader**.
  - The Fader slider is marked.
- Turn the multifunction knob 5 until the desired value is adjusted.
- Press the multifunction knob 5.

Subwoofer*

Use this function to adjust the volume for the separate bass loudspeaker, if applicable.

- Select menu item **Subwoofer** in the sound menu, button **SOUND** 7.
  - A slider for adjusting the Subwoofer volume is displayed.
- Turn the multifunction knob 5 until the desired value is adjusted.
- Press the multifunction knob 5.
  - The sound menu is displayed.

Position

Use this function to optimise the surround sound (running times, frequency response and volumes) using preset values.

- Select menu item **Position** in the sound menu, button **SOUND** 7.
  - The Position menu is displayed.

The following options are available:

- **Front**: Optimisation of surround mapping for the front seats.
- **All positions**: Optimisation of surround mapping for all seats.
- **Off**: Optimisation deactivated.

- Select the desired option.

SOUND SETTINGS cont.

EQ mode

Use this function to select equalisation sound modes.

- Select menu item **EQ Mode** in the sound menu, button **SOUND** 7.
  - The EQ Mode menu is displayed.

The following options are available: Jazz, Speech, Pop, Classic, Rock, User (user-defined sound setting, refer to *Equalizer* below).

- Select the desired menu item.

Equalizer

Use this function to influence seven sound frequencies (7-band graphic equaliser).

Note Any sound optimisations that are made (refer to *EQ Mode* above) will be deactivated.

- Select menu item **Equalizer** in the sound menu, button **SOUND** 7.
  - The Equalizer menu is displayed.

A slider is provided for each of the sound frequencies.

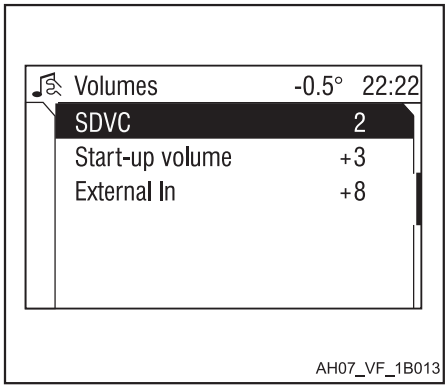
- Select the desired sound frequency.
  - The desired slider is marked.
- Turn the multifunction knob 5 until the desired setting is reached.
- Press the multifunction knob 5.

If you have made settings with the equaliser, then the **User** option field in the EQ Mode menu is automatically selected (⊙). Refer to *EQ Mode* above.

VOLUMES

The following menu items are available in the volume menu:

- **SDVC**:
  Speed-dependent volume control.
- **Start-up volume**:
  Maximum volume at switch-on.
- **External in**:
  Volume of an external audio source, e.g. mobile phone.



SDVC

To compensate ambient and road noise, the audio systems volume is adjusted to the speed of the vehicle. You can use the SDVC function to adjust the speed dependent volume.

This function is set in the tuner button **FM/AM** 2 or CD button **CDC** 3 menu.

- Press button **SETTINGS** 11.
  - The audio settings menu is displayed.
- Select menu item **Volumes**.
  - The Volumes menu is displayed.
- Select menu item **SDVC**.
  - A slider for adjusting the speed dependent volume is displayed.
- Turn the multifunction knob 5 until the desired value is adjusted.
- Press the multifunction knob 5.
  - The Volumes menu is displayed.

Start-up volume

Use this function to adjust the maximum start-up volume.

This function is set in the tuner button **FM/AM** 2 or CD button **CDC** 3 menu.

- Press button **SETTINGS** 11.
  - The audio settings menu is displayed.
- Select menu item **Volumes**.
  - The Volumes menu is displayed.
- Select menu item **Start-up volume**.
  - A slider for adjusting the maximum start-up volume is displayed.
- Turn the multifunction knob 5 until the desired value is adjusted.
- Press the multifunction knob 5.
  - The Volumes menu is displayed.

The maximum switching-on volume adjusted is used when the audio system is switched on only if the volume prior to switching off the system was higher than the maximum switching-on volume and the audio system has been off for at least five minutes with the ignition off.

VOLUMES cont.

External In

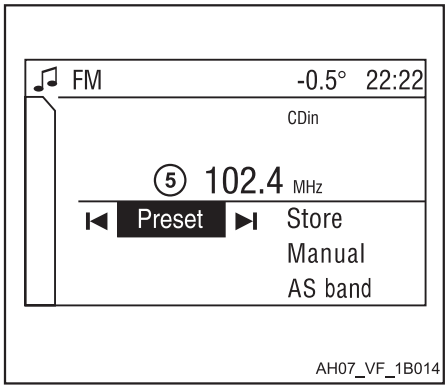
Use this function to adjust the volume of external audio sources such as a mobile phone.
This function is set in the tuner **FM/AM** ❷ or CD button **CDC** ❸ menu.

- Press button **SETTINGS** ⓫.
  - The audio settings menu is displayed.
- Select menu item **Volumes**.
  - The Volumes menu is displayed.
- Select menu item **External In**.
  - A slider for adjusting the volume of external audio sources is displayed.
- Turn the multifunction knob ❺ until the desired value is adjusted.
- Press the multifunction knob ❺.
  - The Volumes menu is displayed.

RADIO

Switching the audio system on

- Press button ❶.
  - The audio source last selected is played.



Radio mode

Switch from CD mode to radio mode as shown below:

- Press button **FM/AM** ❷.
  - The tuner menu is displayed.
  - The station last selected is received.

If you are in the tuner menu and press button **FM/AM** ❷, the radio toggles between the FM and AM wave bands.

Selecting a wave band (for radio mode)

The following wave bands are available:

- FM = ultra-short wave.
- AM = medium wave.
  - The station last selected is received.
  - You are in the tuner menu.

- Turn the multifunction knob ❺ to the left until menu item **Return** is displayed on the title bar.
- Press the multifunction knob ❺.
  - The audio menu is displayed.
- Select wave band FM or AM.
  - The station last selected on the wave band is received and displayed.

    or
  - You are in the tuner menu.
- Press button **FM/AM** ❷.

The radio toggles between the FM and AM wave bands.

  - The station last selected on the wave band is received and displayed.

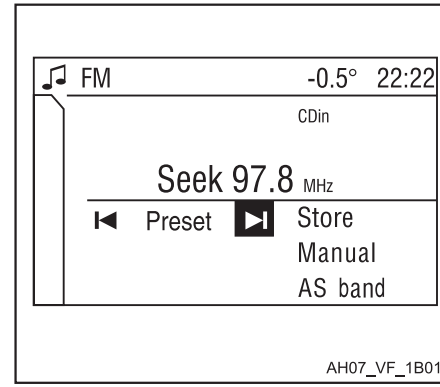
Station search

There are two options for searching a station:

- **Automatic station search**, refer further on in this chapter.
- **Manual station search**, refer further on in this chapter.

RADIO cont.

Automatic station search



- Briefly press the rocker switch 12.
  - Seek is displayed.
  - The radio is muted until a station is found.

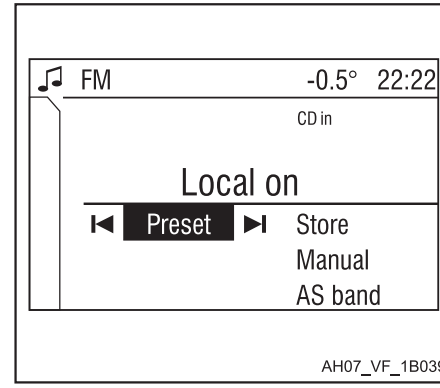
If you know the frequency of the desired station, then keep the rocker switch 12 pressed until the frequency is almost reached.

After releasing the rocker switch, the next receivable station is automatically tuned in.

If the radio doesn't find a station, it will automatically switch to a more sensitive search mode. Refer to *Localisation* below.

The automatic station search can be limited to the radio stations with the strongest reception. Refer to *Localisation* below.

Localisation



In local mode, the automatic station search is limited to the radio stations with the strongest reception. In order to activate/deactivate the localisation, proceed as follows:

  - The radio is on.
- Press button **LOC** 13.
  - The current mode **Local on/off** is displayed.

Local on means that the localisation is activated.

Local off means that the localisation is deactivated.

- To change the mode press button **LOC** 13 again.

If you do not press the button **LOC** 13 again, the current station is displayed after a short time and the audio system stays in the current mode.

The default mode (the mode which is set when the audio system is first connected to the vehicle) is **Local on**.

RADIO cont.

Manual station search

The manual station search is used to tune in to stations of known frequencies.

Station search with the rocker switch:

- Press the rocker switch ⓬ until the desired frequency is reached.

Coarse tuning:

- Keep the rocker switch ⓬ pressed until the desired frequency is almost reached.

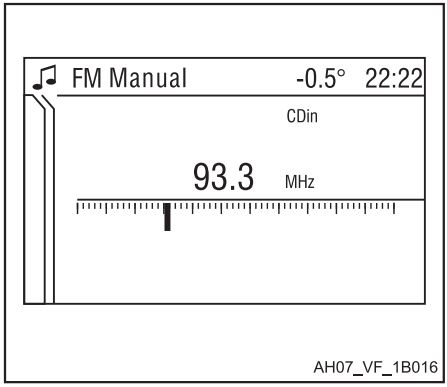
Fine tuning:

- Tap on the rocker switch ⓬ repeatedly until the exact frequency is reached.

Station search with the multifunction knob:

The station search with the multifunction knob is started from the tuner menu button **FM/AM** ❷.

- Select menu item **Manual**.
  - A slider with the entire wave band is displayed.
  - The frequency last tuned in is displayed.
- Turn the multifunction knob ❺ until the exact frequency is reached.
  - You are listening to the newly tuned-in station.
- Press the multifunction knob ❺.
  - The tuner menu is displayed.
  - The newly tuned-in station is displayed.



Station memory

Separate memory locations are available for each wave band (FM, AM):

- 9 x FM.
- 9 x FM-AS (automatically stored FM stations).
- 9 x AM.
- 9 x AM-AS (automatically stored AM stations).

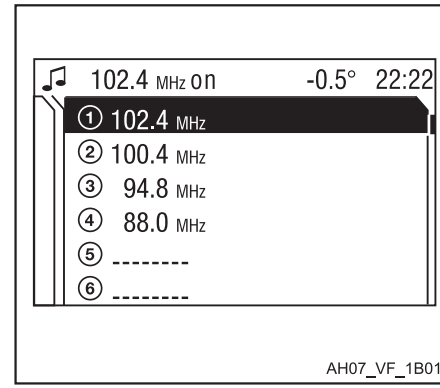
Stored stations can be selected by pressing the appropriate station button ❾ or in the Station menu. Refer to *Recalling a preset station* further on in this chapter.

RADIO cont.

Manual storing:

Two options are available for manual station storing:

- Tune in to the desired station. Refer to *Station search* previously in this chapter.
- Keep the station button ❾ pressed to which the tuned-in station is to be stored.



At first, the radio briefly mutes and indicates the station previously stored in the memory location.

- After this, the station tuned in is heard and indicated on the display.
- The station is stored in the desired memory location.

  or

- You are in the tuner menu, button **FM/AM** ❷.

- Adjust the desired station. Refer to *Station search* previously in this chapter.
- Select menu item **Store**.
  - A list of all memory locations is displayed.
- Select the desired memory location.
  - The tuner menu is displayed.
  - The new memory location is displayed.

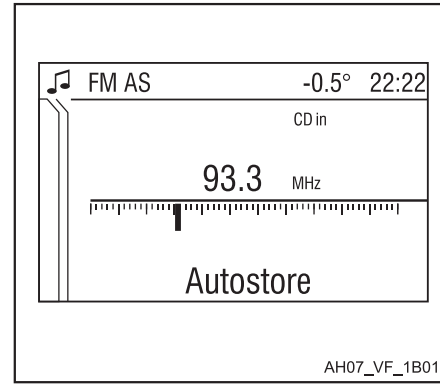
The station is stored in the desired memory location.

Autostore (AS):

Automatic storing (AS) of any receivable station is possible in both wave bands.

These stations are stored in a separate AS memory.

- To automatically store stations, AS band needs to be selected. Refer to *Switching to AS Band* further on in this chapter.
  - You are in the tuner menu, button **FM/AM** ❷.
- Select menu item **Autostore**.
  - The Autostore menu is displayed.
  - The entire wave band is displayed.
  - The automatic station storing is started.



The nine best receivable stations in the selected wave band are stored to memory locations 1 to 9.

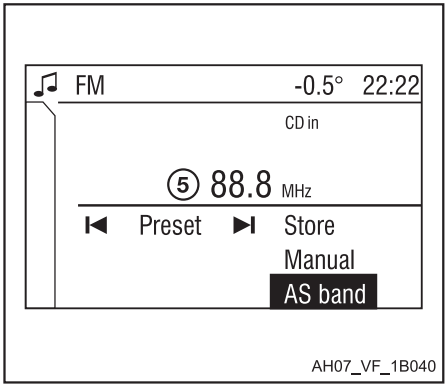
RADIO cont.

Switching between AS and AM/FM band

Switching to AS band:

If the **Autostore** menu item is not available in the tuner menu, proceed as follows:

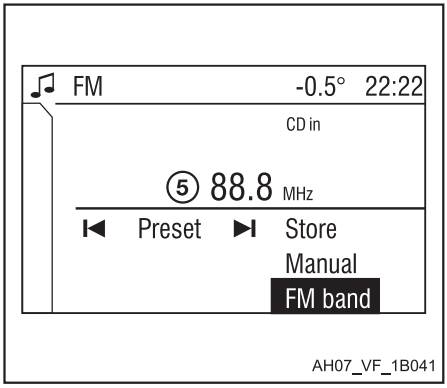
- Select menu item **AS band**:
  - The radio switches to AS band of the selected wave band.
  - The Tuner menu is displayed where the **Autostore** menu item is available.



Switching to AM/FM band:

If the Autostore menu item is available in the tuner menu, proceed as follows:

- Select menu item FM band or **AM band.**
  - The radio switches to AM/FM band of the selected wave band.
  - The tuner menu is displayed where the **Store** menu item is available.



Storing new stations with AS

If you drive out of the reception area of a stored station, new stations need to be stored. Refer to *Autostore (AS)* previously in this chapter.

Recalling a preset station

There are two ways stations can be called:

- Using the preset buttons.
- Using the preset list.

The desired wave band and, as the case may be, the AS band need to be active. Refer to *Selecting a wave band (for radio mode)* and *Switching Between AS* and *AM/FM Band* previously in this chapter.

Recalling a preset station with a button:

- You're listening to the station last tuned in.

- Select the desired station with the station buttons 1 to 9 ❾.
  - The newly tuned-in station is displayed.
  - The newly tuned-in station is received.

RADIO cont.

Recalling a preset station with a list:

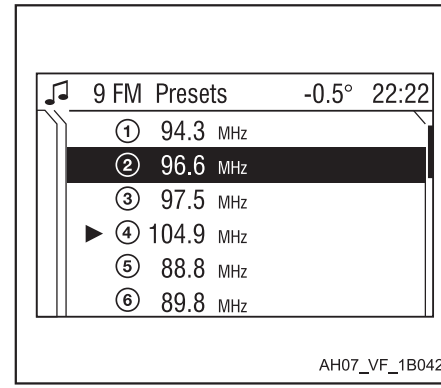
- You are in the tuner menu, button **FM/AM** ❷.

• Select menu item **Preset**.

- The Presets list is displayed.
- The station currently tuned in is marked with an arrow.

• Select the desired station.

- The tuner menu is displayed.
- The newly tuned-in station is displayed.
- The newly tuned-in station is received.



CD CHANGER

The audio system is equipped with a CD-Changer for six CDs.
The changer can play commercially available 12-cm CDs.

WARNING
Danger – destroying the CD-drive!

- Where applicable, remove the protection film from the unlabelled side of the CD. Otherwise, heat development of the CD drive may strip the film blocking the CD drive in turn.
- No warranty is granted for damage due to the protection film.
- Single CDs with a diameter of 8 cm and shape CDs are not suitable for playback on this player.
- No warranty is granted for damage due to the use of unsuitable CDs.
- Do not insert DVDs into the CD drive.

Ever more often, audio CDs are provided with copy protection mechanisms to protect them against unauthorised reproduction. However, these measures do not comply with the audio CD specification (Red Book) following which all appliances for playing audio CDs have been and are being developed. Your appliance can play back CDs with copy protection versions known at the time the player is sold. However, this cannot guarantee that it will be able to play back future CDs with new variants of the copy protection mechanisms.

Switching on the audio system

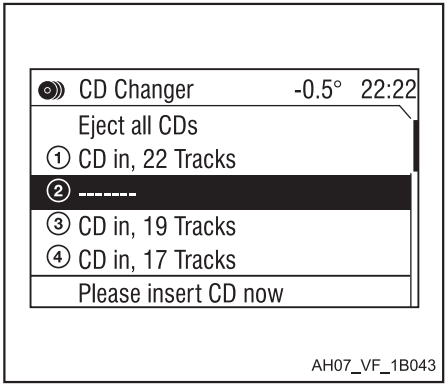
- Press knob 1.
  - The audio source last selected is played.

Inserting a CD

- Press button 14.
  - The CD-Changer menu is displayed.

In the CD-Changer menu, radio mode is always on to bridge CD changes.

- Select an empty CD compartment by using the multifunction button 5.
  - **Please insert CD now** is displayed on the bottom bar of the display.
- Insert the CD into the CD slot 10.
  - Press button 5 for the audio system to pull the CD in.
- Do not impede or support the insertion of the CD.
  - **CD in** is displayed in the CD compartment highlighted.



CD CHANGER cont.

CD playback

Switch from radio mode to CD mode as follows:

- One or several CDs are in the CD changer.

• Press button **CDC** 3.

- The CD menu is displayed.
- The selected CD compartment and the track are displayed.
- The CD in the selected CD compartment is played.

If no CDs are inserted, the CD-Changer menu is displayed. Refer to *Inserting a CD* previously in this chapter.

Track selection

- You're listening to a track.

• Tap on the rocker switch 12 repeatedly until the desired track is displayed.

- The desired track is started.

  or

- You are in the CD menu, button **CDC** 3.

• Turn the multifunction button 5 until menu item ⏮ or ⏭ is marked.

• Press the multifunction button 5 repeatedly until the desired track is displayed.

- The desired track is started.

  or

- You are in the CD menu, button **CDC** 3.

• Select menu item **Track** using the Multifunction button 5. Push to engage the mode.

- A list of all tracks is displayed.
- The current track is marked with an arrow.

• Select the desired track.

- The CD menu is displayed.
- The selected track is displayed.
- The selected track is started.

CD CHANGER cont.

Fast forward/backward search

To find a certain location on a CD, proceed as follows:

- You're listening to the track.

• Keep rocker switch 12 pressed until the desired location is displayed.
- The CD changer plays back the CD at increased speed and reduced volume.

or
- You are in the CD menu, button **CDC** 3.

• Select menu item ◀◀ or ▶▶.
- The CD changer plays back the CD at increased speed and reduced volume.

• Again select menu item ◀◀ or ▶▶ when the desired passage is reached.

Selecting a CD

- You're listening to a track.

• Press the appropriate number key **1** to **9** 9.
- **Reading...** is displayed.
- The selected CD compartment and the track are displayed.
- You're listening to the CD in the selected CD compartment.

If no other CDs are inserted, playback of the current CD is continued.

or

• Tap on the rocker switch 12 repeatedly until the desired CD compartment is marked.
- **Reading...** is displayed.
- The selected CD compartment and the track are displayed.
- The CD in the selected CD compartment is played back.

If no other CDs are inserted, playback of the current CD is continued.

or

• Starting from the CD menu, button **CDC** 3, select the desired CD as shown below:

• Select menu item **CD** using the Multifunction button 5 push to engage the mode for selecting the CD#.
- A list of all CDs is displayed.
- The CD currently played back is marked with an arrow.

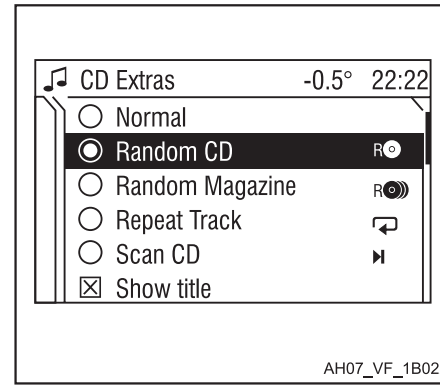
• Select the desired CD.
- The CD menu is displayed.
- The newly selected CD is displayed.
- The newly selected CD is played back.

CD CHANGER cont.

CD extras

The following option fields are available in the extras menu:

- Normal: This option is used to deactivate the functions Random CD/Magazine, Repeat Track and Scan CD.
- Random CD: refer to *Random Play CD/Magazine* below.
- Random Magazine, refer to *Random Play CD/Magazine* below.
- Repeat Track, refer to *Repeat Track* further on in this chapter.
- Scan CD, refer to *Scan CD* further on in this chapter.
- Show title, refer to *Activating/ Deactivating CD Text* below.



Random play CD/magazine

With Random CD, the tracks of a CD are played back in random order.

With Random Magazine, the tracks of all inserted CDs are played back in random order.

Note In order to avoid mechanical wear and to prevent longer interruptions between CD changes, the audio system plays back eight tracks per CD before switching to the next CD.

Activating CD random play:

- You are in the CD menu, button **CDC** 3.

• Select menu item **Extras**.

- The Extras menu is displayed.

• Select option field **Random CD**.

- The CD menu is displayed.
- The R symbol is displayed.

Activating magazine random play:

- You are in the CD menu, button **CDC** 3.

• Select menu item **Extras**.

- The Extras menu is displayed.

• Select option field **Random Magazine**.

- The CD menu is displayed.
- The R symbol is displayed.

Deactivating magazine/CD random play:

- You are in the CD menu, button **CDC** 3.

• Select menu item **Extras**.

- The Extras menu is displayed.

• Select option field **Normal**.

- The CD menu is displayed.
- The R or R symbol is no longer displayed.

CD CHANGER cont.

Repeat track

The **Repeat Track** function repeats the current track.

Activating repeat track:

- You're listening to a track.

• Keep rocker switch 12 pressed until the ⮌ symbol is displayed.

The track will be repeated until the function is deactivated.

or

- You are in the CD menu, button **CDC** 3.

• Select menu item **Extras**.
- The Extras menu is displayed.

• Select option field **Repeat Track**.
- The CD menu is displayed.
- The ⮌ symbol is displayed.

The track will be repeated until the function is deactivated.

Deactivating repeat track:

• Keep rocker switch 12 pressed until the ⮌ symbol is no longer displayed.

or

• Select a new track (refer to *Track selection* previously in this chapter).

or

- You are in the CD menu, button **CDC** 3.

• Select menu item **Extras**.
- The Extras menu is displayed.

• Select option field **Normal**.
- The CD menu is displayed.
- The ⮌ symbol is no longer displayed.

Scan CD

Use the scan CD function to play the first 10 seconds of each track.

Activating Scan CD:

- You're listening to a track.

• Keep rocker switch 12 pressed until the ⏭ symbol is displayed.

or

- You are in the CD menu, button **CDC** 3.

• Select menu item **Extras**.
- The Extras menu is displayed.

• Select option field **Scan CD**.
- The CD menu is displayed.
- The ⏭ symbol is displayed.

CD CHANGER cont.

Deactivating scan CD:

- Keep the rocker switch ⑫ pressed until the ⏭ symbol is no longer displayed.
  or
- Select a new track (refer to *Track selection* previously in this chapter).
  or
  - You are in the CD menu, button **CDC** ③.
- Select menu item **Extras**.
  - The Extras menu is displayed.
- Select option field **Normal**.
  - The CD menu is displayed.
  - The ⏭ symbol is no longer displayed.

Activating/deactivating CD text

Depending on whether CD text is activated or deactivated, different information is displayed:

Activated:

- CD name.
- Track name.
- Artist.

Deactivated:

- Track number.
- Playing time.

Not all CDs contain CD text. If a CD doesn't, track number and playing time are always displayed.

  - You are in the CD menu, button **CDC** ③.
- Select menu item **Extras**.
  - The Extras menu is displayed.
- Check/uncheck the **Show title** checkbox.

☒ Activated.

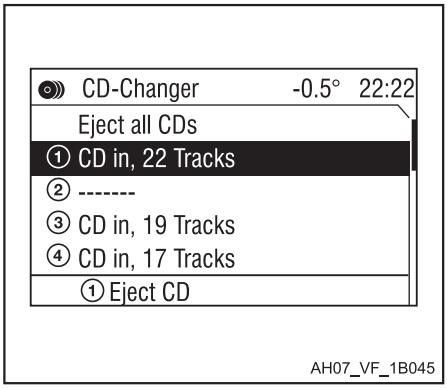
☐ Deactivated.

CD CHANGER cont.

Ejecting a CD

- Press button 14.
  - The CD-Changer menu is displayed.
  - The station last tuned in is received.
- Select the desired CD.
  - The CD changer ejects the CD.
- Remove the CD.

If the CD is not removed, it is automatically re-inserted after a few seconds.



Ejecting all CDs

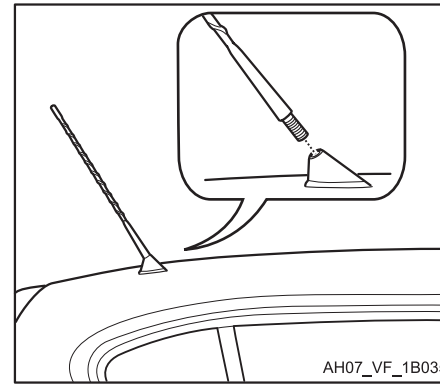
- Press button 14.
  - The CD-Changer menu is displayed.
  - The station last tuned in is received.
- Select menu item **Eject all CDs**.
  - The CD changer ejects all CDs one after the other.

If a CD is not removed, it is automatically re-inserted after a few seconds and the procedure is aborted.

ANTENNA INFORMATION

Fixed mast antenna (hatch and wagon)

To remove the roof antenna (located at the rear of the roof), rotate it anticlockwise. To install the roof antenna, rotate it clockwise.

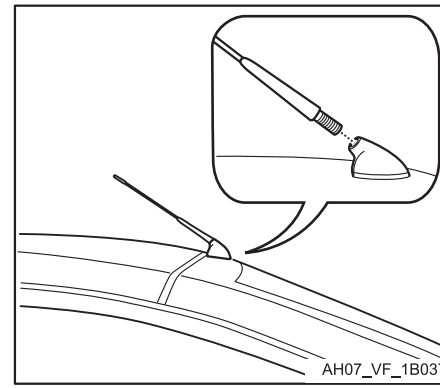


Fixed mast antenna (TwinTop)

To remove the roof antenna (located at the front of the roof), rotate it anticlockwise. To install the roof antenna, rotate it clockwise.

WARNING

Driving through an automatic car wash with the antenna installed may result in damage to the antenna or the roof panel. Be sure to remove the antenna before entering an automatic car wash.



TROUBLE-SHOOTING

Should your audio system not function as you expect, read the operating instructions carefully and work through the following checklist before contacting your Holden Dealer.

If you cannot find a solution to the problem, we recommend contacting your Holden Dealer.

CD, SRI, CDTI

Error message/symptom	**Possible cause/remedy**
General	
Display dark.	Vehicle's battery may be weak (if operated without the engine running).
Display difficult to read.	Display contrast settings badly adjusted (graphic info display*. Refer to chapter 1A.
Audio system cannot be switched on either with button 8 or with the ignition key.	Fuse of the audio system or fuse in the vehicle defective.
Incorrect time indicated on the display.	Refer to *Information displays** in chapter 1A.
Audio	
Audio playback volume decreases and cannot be adjusted.	Audio system too hot; internal temperature regulation active to protect the audio system. Recommendation: switch audio system off.
Stored station cannot be selected via station button 12.	Station temporarily not received.
Error CD is indicated, CD is automatically ejected.	CD soiled, scratched or incorrectly inserted. Incompatible CD format e.g. DVD etc.

TROUBLE-SHOOTING cont.

Should your audio system not function as you expect, read the operating instructions carefully and work through the following checklist before contacting your Holden Dealer.

If you cannot find a solution to the problem, we recommend contacting your Holden Dealer.

CDX, SRI turbo and TwinTop

Error message/symptom	Possible cause/remedy
General	
Display dark.	Vehicle's battery may be weak (if operated without the engine running).
Display difficult to read.	Display contrast settings badly adjusted. Refer to chapter 1A.
Audio system cannot be switched on either with button ❶ or with the ignition key.	Fuse of the audio system or fuse in the vehicle defective.
Incorrect time indicated on the display.	Refer to *Information displays*✻ in chapter 1A.
Audio	
Audio playback volume decreases and cannot be adjusted.	Audio system too hot; internal temperature regulation active to protect the audio system. Recommendation: switch audio system off.
Stored station cannot be selected via station button ❾.	Station temporarily not received.
Message **Invalid CD**.	CD soiled, scratched or incorrectly inserted. Incompatible CD format (DVD, MP3 CD) etc.
CD player does not run.	No CD in the CD changer. CD soiled, scratched or incorrectly inserted. Incompatible CD format (DVD, MP3 CD) etc.

GENERAL NOTES

Radio reception

Due to varying reception locations, car radios have performance limitations that may on occasions create the impression that your radio is malfunctioning. To assist you in understanding what can be expected from your radio, we have set out below how reception may vary from time to time and under certain conditions.

AM and FM

There are two types of radio broadcasts in Australia, AM or Amplitude Modulation in which the amplitude of the signal is varied to produce the sound and FM or Frequency Modulation in which the frequency is varied to produce the sound.

Range

AM broadcasts tend to follow the earths curvature and also reflect from the upper atmosphere, which enables long range reception, especially after sunset.

FM transmissions are basically line-of-sight (similar to TV signals) and are reflected by buildings, mountains etc., but not by the upper atmosphere.

Interference

Interference is caused by either natural or man-made electrical disturbances. This can affect the amplitude of the signal being received. AM signals are more prone to this type of interference than FM signals. This type of interference has little or no effect on the frequency of the received signal, thus AM is susceptible to interference from power lines, fluorescent lighting, neon signs, traffic light control circuits, overhead tram wires and electrical storms. With FM reception, these amplitude variations are filtered out, leaving a relatively clear signal (refer to *Peculiarities of FM mobile reception* below), making this one of the major advantages of FM broadcasts.

Peculiarities of FM mobile reception

A mobile FM radio cannot be expected to continuously provide the quality of FM reception you may have experienced on your home radio. Contrary to popular opinion, FM broadcasts are not static-free, and although your radio has a built-in electronic interference absorption circuit, some static will be evident from time to time, especially in areas without a direct line of sight to the transmitter.

Your radio is also equipped with a soft mute function. The purpose of this is to attenuate the treble and audio level in weak signal areas to reduce the very annoying background hiss, which is customary to weaker FM reception. There are two phenomena peculiar to FM reception.

- **Flutter** - As FM signals reflect off solid objects, it is possible to pass through areas of “SHADOW” caused by tall buildings and/or hilly terrain, which effectively blocks out the signal. As the car passes in and out of shadow areas, the level of signal will vary at a rapid rate, creating a flutter type of interference to the signal.
- **Distortion (Multipath)** - Distortion may occur when the direct signal from the transmitter and a reflected signal reach the antenna at the same time and either cancel or aid each other, like ghosting on a TV. This results in intermittent distortion of the signal while moving or constant distortion when stationary, such as at a traffic light or when parked. Should this distortion occur while stationary, moving the car approximately 1 or 2 metres would on most occasions correct the problem.

GENERAL NOTES cont.

To reduce the effects of interference and/or poor signal strength, several features have been included within the radio which work automatically when needed:

- **Soft muting circuit** - The built-in soft muting circuit will reduce the FM stereo separation and treble response if the signal from the radio station diminishes. This effectively lessens the amount of hiss and background noise that is usually heard with weaker FM signals.
- **Multipath detection circuit** - If repeated multipath signals are received, the circuitry will switch the radio into MONO mode and slightly reduce the treble response. It will gradually return to STEREO with full treble response when multipath conditions are no longer being experienced.

Car telephone

This audio system includes a telephone input facility. If a mobile phone hands-free kit with suitable features (such as a mute line and wiring for separate speaker) has been connected to it, the audio system will be muted when the phone rings and the voice of the caller will be heard through the car speakers. When the call ends the audio system will return to the previous mode.

During a call **PHONE** will be shown on the display.

If the audio system is off, it will turn on for the telephone call if the car accessories or ignition is already switched on.

If a call is in progress when the accessories are turned off and keys are removed from ignition, the audio system will remain turned on in telephone mode until the phone call is completed, i.e. does not interrupt your phone conversation.

Volume, bass, treble, fader and balance can all be adjusted in the telephone mode without affecting these settings in radio, CD or AUX mode.

Important When this feature is used for the first time, the volume may need to be adjusted on the phone as well as the radio. This should be done while a call is being made. Firstly, adjust the phone volume to a medium level using the volume control on the phone itself. The radio volume may now be adjusted as required to compensate for variations in the mobile phone signal quality or changes in the background noise within the car e.g. if the window is wound down.

Note If the call sounds unusually distorted, the volume setting on the phone itself may need to be adjusted until the sound quality is improved.

Please contact your Holden Dealer for further Information.

Speed dependent bass enhancement*

To compensate for ambient and rolling noise the bass range is automatically adjusted to the speed of the car. The setting cannot be changed.

GENERAL NOTES cont.

Servicing and care

Your audio system has been developed and manufactured with great care and should be treated with care. Observing the recommendations listed below will prevent your warranty from expiring prematurely and ensure you'll be able to enjoy your product for many years. Heed the following when using your audio system:

- Never try to open the audio system. Improper handling may damage the audio system.
- Never use aggressive chemicals, cleaning liquids or agents to clean the system. To clean your audio system, use a soft cloth moistened with a mild soap solution.
- Do not paint or colour the system. Paint may make moving parts sticky and impair correct functioning.
- Do not store combustible liquids, gases or explosives in the same room with the audio system, its parts or accessories.
- The audio system should only be serviced by experts. Incorrect installation or servicing of the audio system may have dangerous consequences and result in the warranty becoming void.

NOTES ON COMPACT DISCS

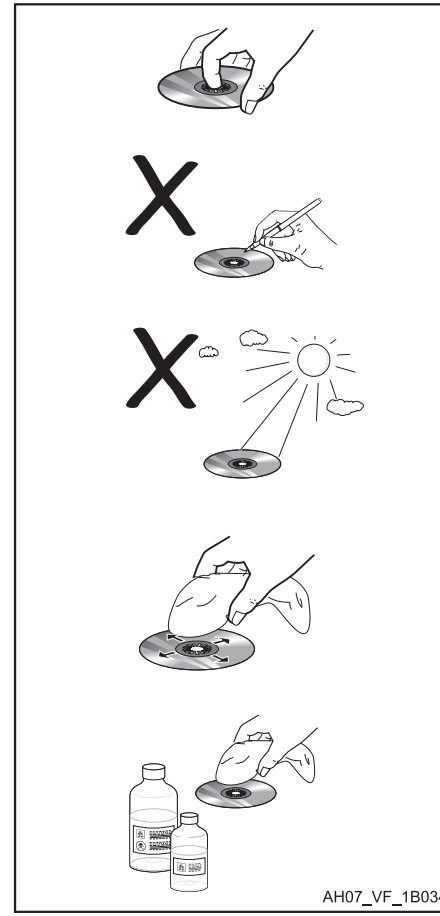
- Handle the CD by its edge and avoid touching the playing surface.
- Directly after removal from the slot, place the CD into the CD cover to prevent damage or soiling.

- Do not stick paper labels, tape, etc., and do not write on either surface.

- Do not expose the CD to direct sunlight or a heat source such as a hot air duct.
- Dirt and liquids on CDs may soil the audio systems CD player lens and result in malfunction.

- Before inserting a CD into the player, check the playing surface and clean it with a suitable cleaning cloth. Wipe the CD from the centre outwards, rather than in a circular motion. Refer to opposite diagram.

- Do not use solvents such as petrol, thinners, etc. Use commercially available CD cleaners.



Note A CD ROM without MP3 files, Video CD or DVD will not be played; if inserted, **Error CD** is indicated and the disc is automatically ejected.

GLOSSARY

Automatic station search
Station search by the tuner. The tuner will search until a station is found.

Autostore (AS)
All receivable stations can automatically be stored in the FM and AM wavebands. These stations are stored in a separate AS memory.

Balance
Volume distribution between left and right channels.

Bass
Low frequency sounds.

CD text
Information stored on an audio CD which may include the following data:
- Track name.
- Artists name.
- CD album title.

Checkbox*
Box for activating/deactivating menu items of selection menus. Several checkboxes may be checked in one selection menu.

☒ Activated.

☐ Deactivated.

Fader*
Volume distribution between the front and rear speakers.

Option field*
Field for activating menu items of selection menus. Just one option field can be selected.

Selected.

Not selected.

ID3 Tag
Tag in an MP3 file which may include the following data:
- Track name.
- Artists name.
- Publishing year.
- Music style.
- Comments.
- Album name (LP record or audio CD) on which the track was published.

This information may be stored in the MP3 file on a PC.

GLOSSARY cont.

MP3

CD audio data compression method developed by Fraunhofer Institute. Compression allows reduction of the amount of data to around 10% of the original volume without audible losses in sound quality (at a bit rate of 128 kbit/s). If lower bit rates are used to convert the CD audio data into MP3, then the files become even smaller, but sound quality is reduced.

Random playback (CD, SRI, CDTI)

The tracks on a CD are played in random order.

Random play (CDX, SRI turbo and TwinTop)

The tracks on a CD are played back in random order. CDs or whole magazines can be played back randomly:

- Random CD:

  The tracks on a CD are played back in random order.
- Random Magazine:

  The tracks of all inserted CDs are played back in random order. In order to avoid mechanical wear and to prevent longer interruptions between CD changes, the audio system plays back eight tracks per CD before switching to the next CD.

SDVC

Speed Dependent Volume Control:

To compensate ambient and road noise, the radios volume is adjusted to the speed of the vehicle.

Treble

High frequency sounds.

Mixed mode CD

The name mixed mode CD is given to a CD which contains different types of tracks, e.g. data tracks and audio tracks. Data tracks may be photo and video files but also music files in e.g. MP3 format.

MP3

A procedure developed by the Fraunhofer Institute for compressing CD audio data. The compression enables the quantity of data to be reduced to about 10% of its original size without audible loss of quality (at a bit rate of 128 kbit/s). If lower bit rates are used when encoding the CD audio data to MP3, smaller files are possible but only with loss of quality.

Option Field

Field for activating menu items of selection menus. Only one option field can be selected in each case.

- ⊙ – selected.
- ○ – not selected.

GLOSSARY cont.

Scan CD

The scan CD function plays the first 10 seconds of each track.

SDVC

Speed Dependent Volume Control: To compensate for ambient and rolling noise, the radio volume is adjusted to the speed of the vehicle.

Subwoofer*

A speaker which is designed to reproduce low frequency sound waves.

Random mode (random)

In this mode, CDs are played in random order, a distinction is made between random CD and random magazine:

- **Random CD:** The tracks of a CD are played in random order.
- **Random magazine:** The tracks of all the CDs inserted are played in random order. 8 tracks per CD are played before changing to the next CD. This is to protect the mechanical components and prevent longer interruptions to play caused by changing CDs.

NOTES

CHAPTER 2

Locks

Page

Keys 2-2

Door locks 2-5

Tailgate/boot lock.....2-10

Security.....2-11

*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

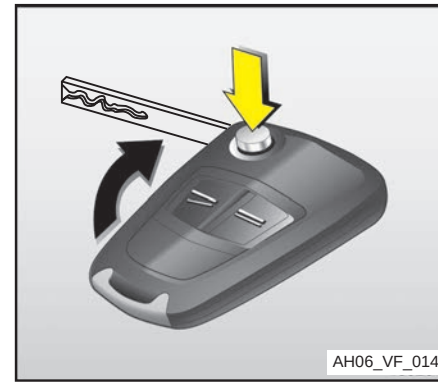
KEYS

Key with foldaway key section

Press button to extend key section.

To retract the key section, press the button and fold the key section into the remote.

Note The key engages audibly.

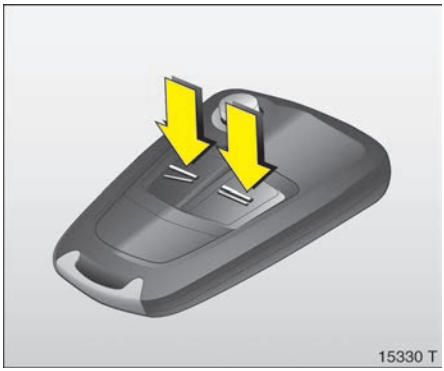


Fuel filler release

The fuel filler flap is unlocked whenever the doors are unlocked. Refer to *Fuel filling* in chapter 5.

KEYS cont.

Operation notes



The remote control is powered by a battery inside the key head. A weakening battery is indicated by a progressive 'loss of range', which means you must be closer to the vehicle when pressing the key.

Tinting the vehicle's windows reduces the range of the key if the tinting material has a metallic film.

Treat the remote with care. Always protect the key against moisture and unnecessary operation.

The hazard warning lights on the vehicle flash briefly to show that the remote control is operational.

Use the remote control to operate:

- Central locking system.
- Electric windows* – four windows only.
- TwinTop convertible hardtop.

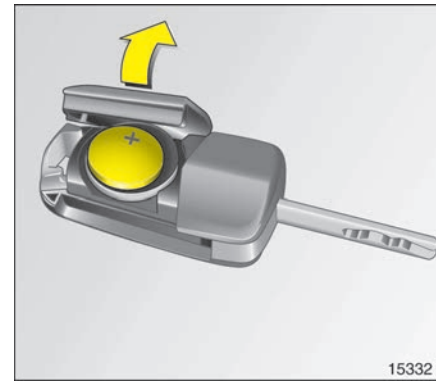
Synchronising the remote control

In the event of a malfunction, synchronise the remote control:

1. Switch on the ignition.
   The system will then remain in synchronising mode for thirty seconds.
2. Briefly press any button on the remote control unit while the unit is in the ignition.
   The central locking system locks and unlocks to show that the remote control has been programmed.

KEYS cont.

Changing the remote control battery



Note The battery change must be performed within 3 minutes, otherwise the remote control will have to be re-synchronised. Refer to the previous page.

To change the battery:

1. Extend the key.
2. Disengage the remote control from the key section using a screwdriver and open the remote control battery cover.
3. Install the battery, ensuring that it is inserted correctly. For remote control battery specification, refer to *Specifications* in chapter 8.
4. Close the remote control so that it clicks into place.

Dispose of the old battery in accordance with environmental protection regulations.

DOOR LOCKS

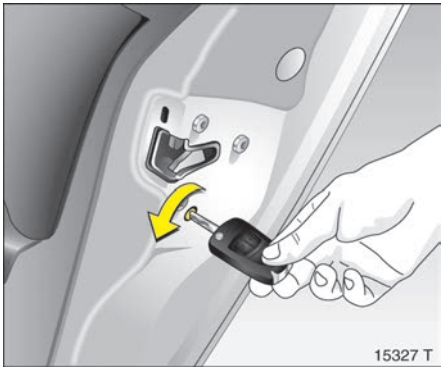
CHILDPROOF SWITCHES FOR THE REAR DOORS

Childproof switches help prevent the rear doors from being accidentally opened by children from inside the vehicle.

The switches are located on the rear edge of the rear doors, accessible when the door is open.

To prevent the door from being opened from the inside, use the ignition key to turn the switch away from the vertical position.

The door can then only be opened by pulling up the inside door lock button and then raising the outside door handle.



WARNING

Use the child safety lock whenever children occupy the rear seats.

For safety, check that the childproof switch is operating correctly (after setting) by trying to open the door from inside the vehicle.

Free turning door locks

The door lock is designed to 'free turn' if it is forcefully rotated with an incorrect key or if the correct key is not fully inserted. To reset the door lock, turn the lock with the correct key until its slot is vertical, remove the key and then re-insert it. If the lock still 'free turns', turn the key a full 180 degrees and repeat the operation.

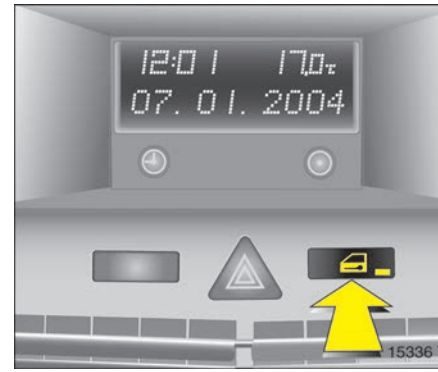
Note This feature is provided as a theft deterrent to prevent the lock from being forced open. The force required to make the key 'free turn' reduces each time. The force gets easier with each free turn. Do not attempt to demonstrate or test this feature and always remember to fully insert the key when locking and unlocking the doors.

If you have problems with this system contact your Holden Dealer.

DOOR LOCKS cont.

To lock and unlock the doors from inside

Press the central locking button on the centre console. The doors are locked or unlocked.



Note

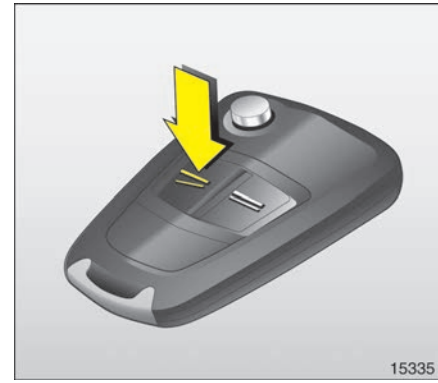
- If the driver's door is not closed properly, the central locking system will deactivate immediately after locking.
- If the central locking system is activated, the doors can be unlocked by pulling one of the interior door handles. This action unlocks all of the other doors (pulling the interior door handles will not unlock the doors when the TwinTop hardtop is open).
- If deadlocking has been activated, the doors cannot be unlocked using this button.

To unlock the vehicle from outside

Press the button on the remote control.

The doors, tailgate/boot and fuel tank filler unlock and the interior light is switched on.

Note Unlocking the doors deactivates deadlocking.

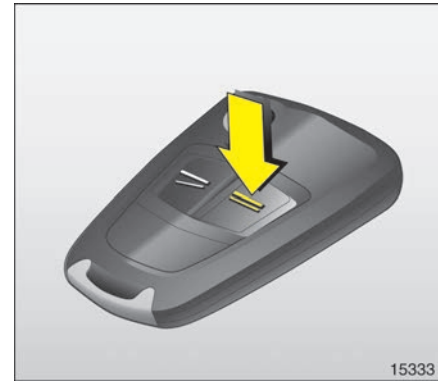


To lock the vehicle from outside

Press the button on the remote control.

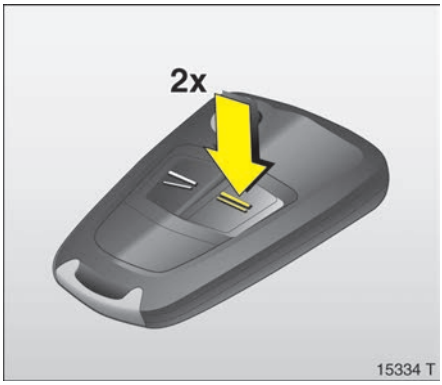
This locks the doors, tailgate/boot and fuel filler flap.

Note Using the key in the driver's door will only lock the driver's door. It will not lock the passenger doors, the tailgate/boot or the fuel filler flap.



DOOR LOCKS cont.

DEADLOCKING



To deadlock all doors:

- All doors must be locked.
- The driver's door must have been opened at least once after the ignition was switched on.
- Press the 〓 button on the remote control again within fifteen seconds after locking.

Deadlocking locks all doors so that no door can be opened even if entry is gained by breaking glass.

Deadlocked doors can only be unlocked from outside the vehicle with the ignition key.

Do not use the deadlock if there are people in the vehicle. The doors cannot be unlocked from inside.

Automatic locking*

The doors can be automatically locked from a speed of 12 km/h.

To activate and deactivate this function, press and hold the central locking button on the centre console for at least three seconds.

The doors will automatically relock five minutes after unlocking with the remote control unless a door or the luggage compartment has been opened.

Note

- If the driver's door is not closed properly, the central locking system will not lock.
- To lock the doors from within the vehicle, press the central locking button on the centre console.
- If the central locking system is locked, the doors can be also unlocked by pulling the interior handle. This unlocks the central locking system (pulling the interior door handles will not unlock the doors when the TwinTop hardtop is open).
- In the event of an accident of a certain severity, locked doors unlock automatically (to allow help to gain entry from outside) and the hazard warning lights are activated provided that the ignition key is inserted in the ignition switch.

Store and activate the settings using the remote controls

When the vehicle is locked with the remote control, the current settings of the electronic climate control* and instrument illumination are saved. The remote controls save and activate settings independently of one another.

DOOR LOCKS cont.

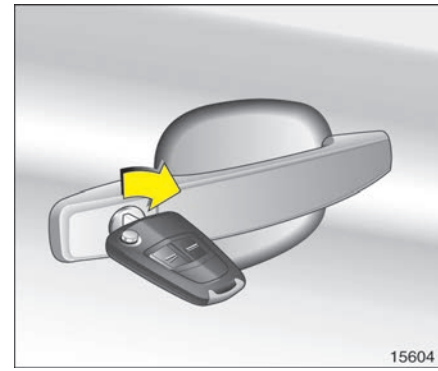
ELECTRIC DOOR LOCKS

Emergency – accident

Locked doors are unlocked automatically in the event of an accident (to allow assistance from outside), provided that the ignition key is inserted in the ignition switch.

Fault in radio frequency remote

You can unlock and lock the driver's door in the event of malfunction of the radio frequency remote.



(A) Unlock

1. Turn the key in the driver's door lock towards the front of the vehicle.
2. Turn it until it will not move any further, then turn the key back to the vertical and remove.
3. Open the door.
4. Press the central locking button on the centre console.

   The vehicle is unlocked.

(B) Lock

1. With the driver's door closed, open the passenger door.
2. Press the central locking button on the centre console.

   The central locking system locks all the doors.
3. Close the passenger door.
4. The vehicle is locked.

DOOR LOCKS cont.

Malfunction in central locking system

(A) Unlock

1. Turn the key in the driver's door lock towards the front of the vehicle as far as it will go.
2. Turn the key back to the vertical position and remove.
3. Open the other doors by pulling the interior door handle. This is not possible if the deadlocking system has been activated.

The luggage compartment and fuel filler cap remain locked.

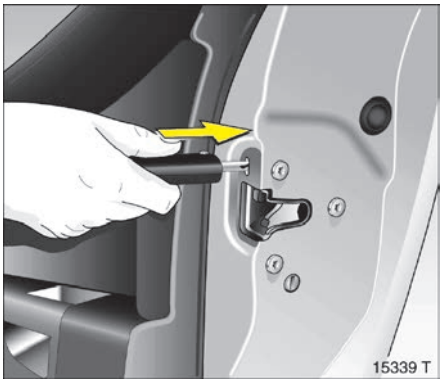
The vehicle is unlocked.

(B) Lock

1. Insert the key in the opening above the lock on the inside of the door and press until the lock is audibly actuated. Close the door.
2. Repeat the procedure for each door.

The driver's door can be locked from the outside using the lock.

The unlocked tailgate/boot and fuel filler flap cannot be locked.

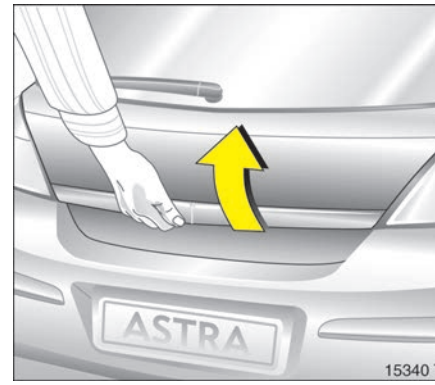


TAILGATE/BOOT LOCK

Unlocking the tailgate/boot

To unlock the tailgate/boot, press the ⊵ button on the remote control.

The luggage compartment is unlocked together with the central locking system and can be opened by pressing the button below the handle.

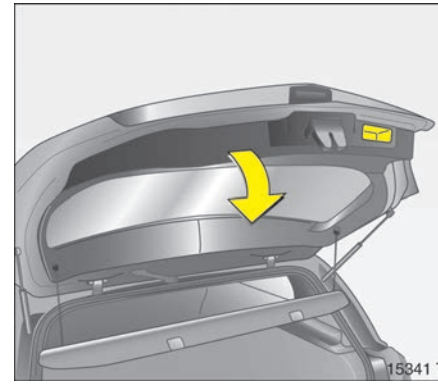


Locking the tailgate

The luggage compartment is locked when the tailgate/boot is closed and the vehicle is locked using the central locking system.

Note For Wagon and hatch there is a handle on the inside of the tailgate for closing the luggage compartment.

WARNING
Do not drive with the tailgate/boot open or ajar as toxic exhaust fumes may enter the vehicle interior.



SECURITY

Your vehicle has a security card which lists various security numbers for your vehicle. Keep the security card in a safe place, away from your vehicle.

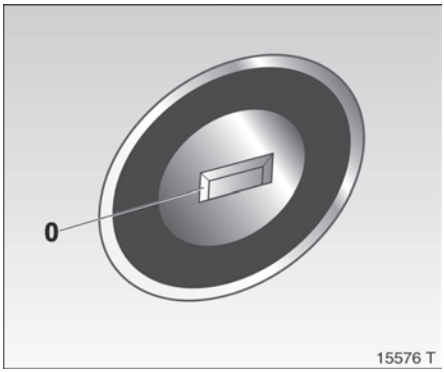
Electronic immobiliser

The system checks whether the vehicle can be started using the key that has been inserted. If the transponder in the key is recognised as 'authorised', you can start the vehicle.

The electronic immobiliser activates automatically when the key is removed from the ignition switch.

Note

- Deactivation is not possible in any other way, so keep a spare key in a safe place.
- The electronic immobiliser does not lock the doors. Always lock the vehicle before leaving it unattended.



Control indicator for immobiliser

When the ignition is switched on, the control indicator (🚲) in the instrument panel illuminates briefly.

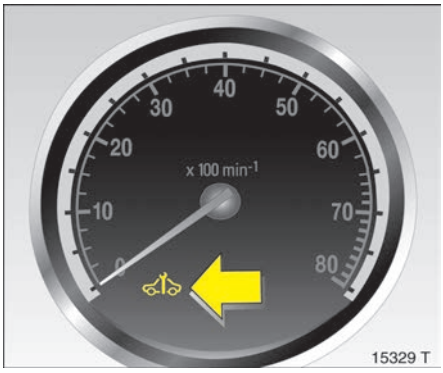
If the control indicator flashes when the ignition is on, there is a fault in the immobiliser system.

If the engine cannot be started:

1. Remove the key from the ignition switch.
2. Insert the key into the ignition switch.
3. Repeat the starting procedure.

If the control indicator 🚲 continues to flash, try to start the engine using the spare key and consult a Holden Dealer.

If the control indicator 🚲 illuminates after the engine has started, there is a fault in the engine electronics or the automatic transmission. Consult your Holden Dealer.



NOTES

CHAPTER 3

Know your vehicle

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*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

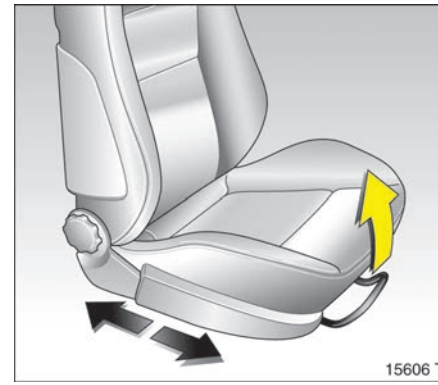
SEATS

FRONT SEAT ADJUSTMENT

Forward/rearward

Pull up the handle at the front of the seat. Using your weight, slide the seat forward or backward. After releasing the handle, try to move the seat back and forth to ensure that the seat has locked into the new position.

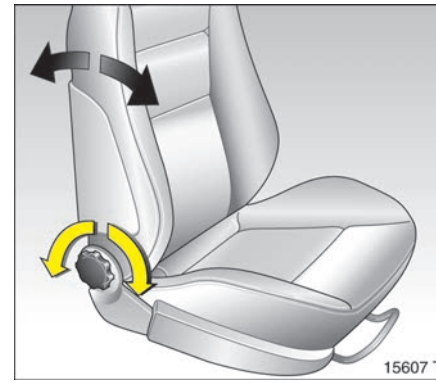
WARNING
Do not adjust the driver's seat when the vehicle is moving as the seat could move suddenly causing the driver to lose control.



Recline/incline

To adjust the angle of the back of the seat, turn the large wheel as illustrated.

WARNING
To avoid reducing the effectiveness of seat belts, seats should only be semi-reclined when the vehicle is moving. Only fully recline the seats when the vehicle is stationary.



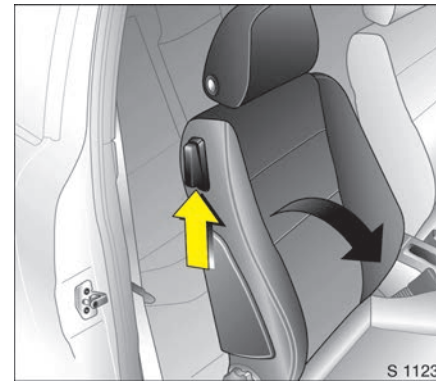
Front seat folding (TwinTop and 3 door hatch)

To allow easy entry and exiting of the rear seating positions, the front seats fold forward.

To fold the front seat forward, lift the release lever, lower the backrest and slide the seat forward.

To raise the seat, slide the seat backwards and engage in position. Lift the release lever and raise the backrest.

Note The seat will engage in the original position when slid backwards.



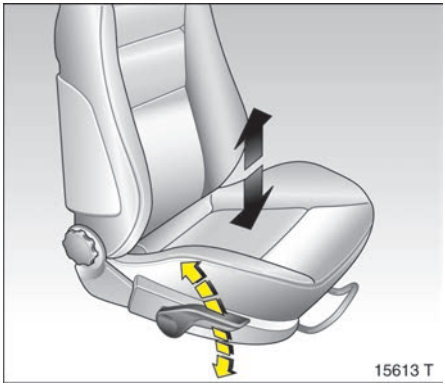
SEATS cont.

Driver's height adjustment

Pump the lever as required:

Up Raises the seat.

Down Lowers the seat.



WARNING – SIDE IMPACT AIRBAGS

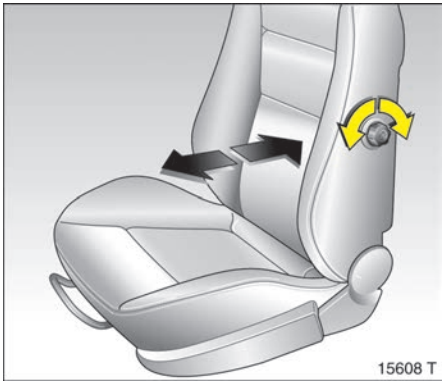
Do not fit unauthorised seat covers as they may impair the deployment of the Side Impact Airbags.

Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door.

Always sit centrally in the seat. Refer to *Airbags* further on in this chapter.

Lumbar support*

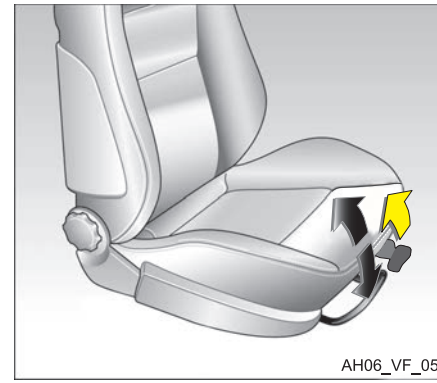
Turn the wheel on the side of the seat back, as illustrated, to adjust the lumbar support.



SEATS cont.

Driver's tilt adjustment*

Pull up on the inner handle to adjust the tilt position of the seat. Use your body weight to move the seat while holding the handle up. After releasing the handle, try to move the seat back and forth to ensure that the seat has locked into the new position.



Front seat heating*

Seat heating only operates when the ignition is switched on and the engine is running.

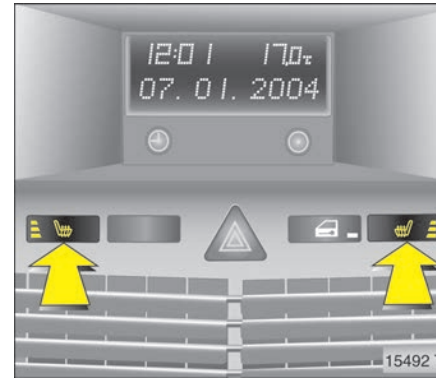
To switch on

Press the switch one or more times to set the desired heat setting. The indicator lights in the switch show which of the three heating levels is active.

To switch off

Press the switch repeatedly until the indicator lights go out.

Note Prolonged use of seat heating is not recommended for people with sensitive skin.



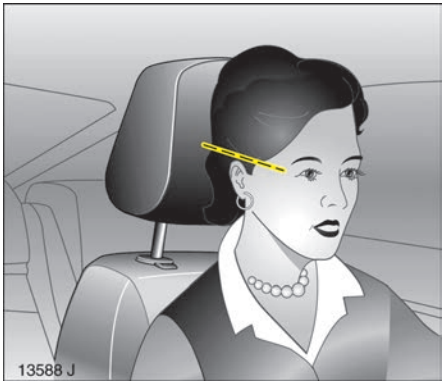
SEATS cont.

HEAD RESTRAINTS

Head restraint position

The middle of the head restraint should be at eye level. If this is not possible; set the head rest to the highest position for extremely tall people and to the lowest position for short people.

Note This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle. Provided the head restraint is adjusted to the correct position.



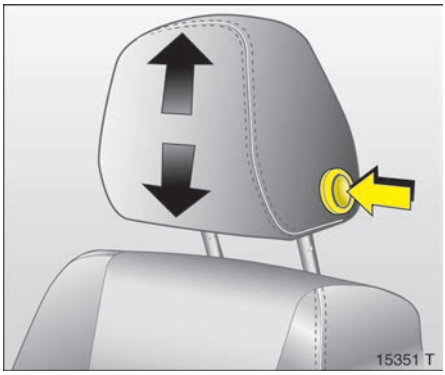
Front seat head restraints

To adjust the tilt angle, move the head restraint backward or forward.

To adjust the height, press the button, adjust to the desired height and release.

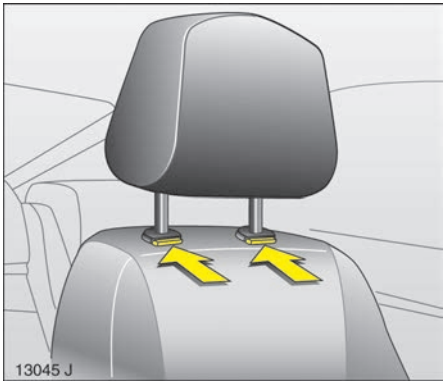
Note

- The middle of the head restraint should be at eye level; never at neck level.
- After adjusting, ensure the head restraint has locked into position by attempting to move it up or down.



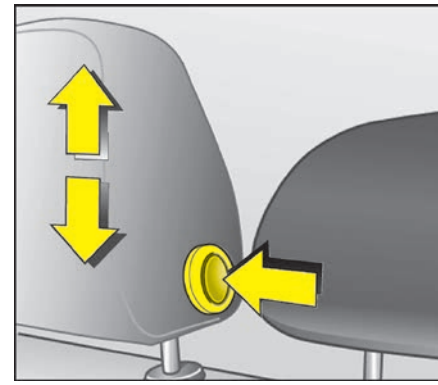
Remove head restraints

Release the two springs (located at the base of the restraint, as illustrated) by pressing them and detaching the head restraint.



SEATS cont.

Rear seat head restraints (wagon and hatch)



To adjust the tilt angle, move the head restraint backward or forward.

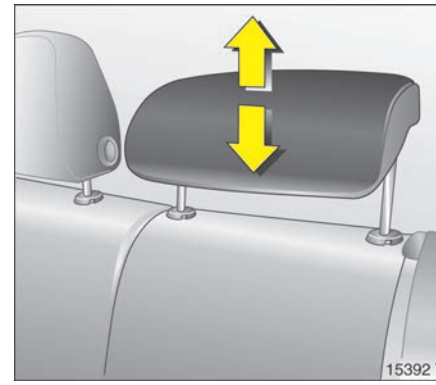
To adjust the height, press the button, adjust the height and release.

Note

- The upper edge of the head restraint should be level with the top of the occupants head; never at neck level.
- After adjusting, ensure the head restraint has locked into position by attempting to move it up or down.

To remove the head restraints, release the two springs (located at the base of the restraint) by pressing them and detaching the head restraint.

Rear centre head restraint* (wagon and hatch)

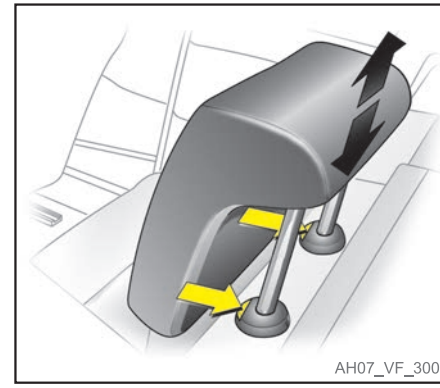


If the centre seat is not occupied, push the head restraint down to its lowest position by pressing the locking springs and pushing down to improve the rear view.

If the centre seat is occupied, set the head restraint to the first or second position according to the height of the passenger.

Note This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle. Provided the head restraint is adjusted to the correct position.

Rear seat head restraints (TwinTop)



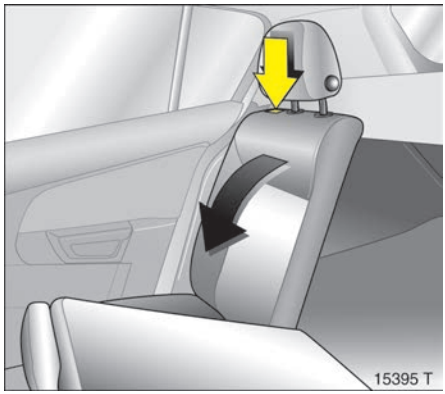
To adjust, pull the head restraint up or press the two catches to release. Then push the head restraint down.

To improve visibility when the rear seats are not occupied, push the head restraints all the way down. If seats are occupied, pull head restraints upwards.

Note Do not place any objects on the cover behind the head restraints or between the head restraints and the anti-roll bars.

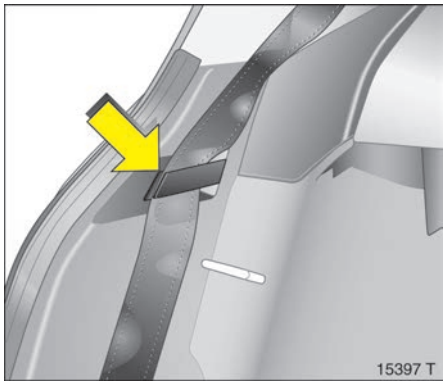
SEATS cont.

REAR SEAT ADJUSTMENT – HATCH



Folding down the rear seat backrests

1. Push the rear head restraints all the way down or remove.
2. Slide front seat forward slightly.
3. Disengage one or both rear seat backrests using the push buttons and fold down onto seat cushion.
4. Return front seat to desired position.



Restoring the rear seat backrests to an upright position

Guide the seatbelt through the side brackets.

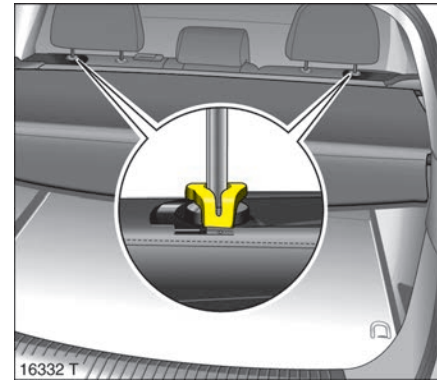
Make sure that the seatbelt is not pinched or damaged.

Make sure that the backrests audibly engage in an upright position.

The three-point seatbelt for the centre rear seat can only be pulled from its inertia reel if the backrest is upright and properly engaged.

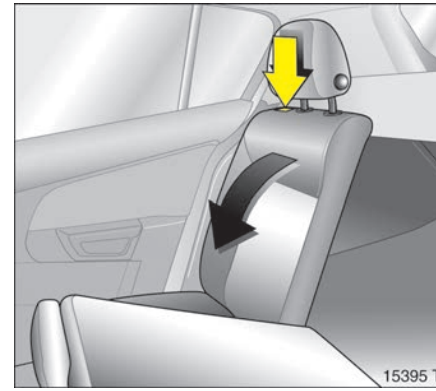
SEATS cont.

REAR SEAT ADJUSTMENT – WAGON



Folding down the rear seat backrests

1. Push the rear head restraints all the way down or remove.
2. Detach the luggage compartment hooks from the rear head restraints.



3. Slide front seat forward slightly.
4. Disengage one or both rear seat backrests using the push buttons and fold down onto seat cushion.
5. Return front seat to desired position.

Restoring the rear seat backrests to an upright position

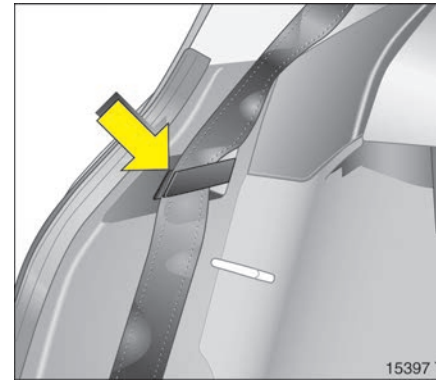
Guide the seatbelt through the side brackets.

Make sure that the seatbelt is not pinched or damaged.

Make sure that the backrests audibly engage in an upright position.

The three-point seatbelt for the centre rear seat can only be pulled from its inertia reel if the backrest is upright and properly engaged.

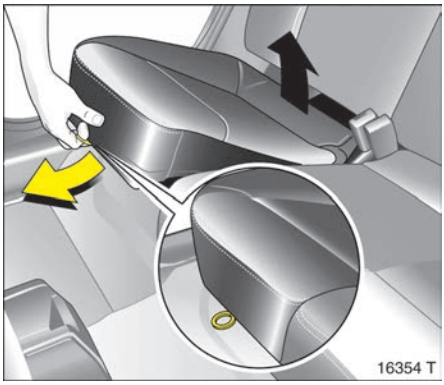
Attach the luggage compartment hooks to the rear head restraints.



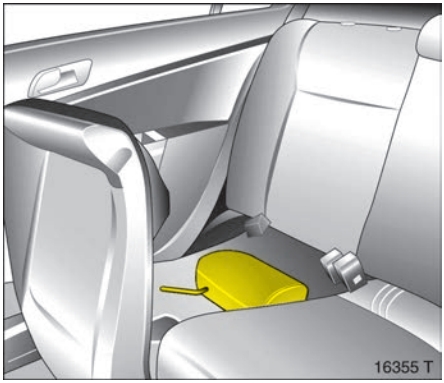
SEATS cont.

Wagon - folding down the rear seat backrests with the seat cushion raised

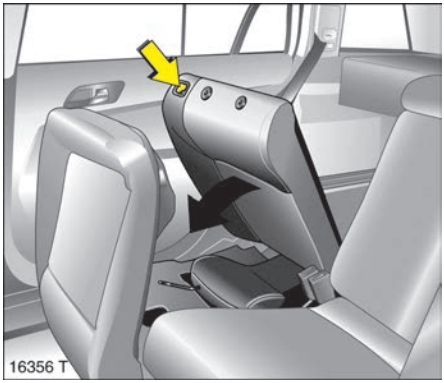
1. Pull the strap on the seat cushion and lift the backrest forward (one or both rear seat backrests).
2. Detach the luggage compartment hooks from the rear head restraints. Refer to *Rear seat adjustment – Wagon* previously in this section).



3. Remove the rear head restraints. Stow the removed head restraints in the cavity below the raised seat cushion.



4. Disengage one or both rear seat backrests using the push buttons and fold down against raised seat cushion.



SEATS cont.

Restoring the rear seat backrests to an upright position with seat cushion raised

Guide the seatbelt through the side brackets.

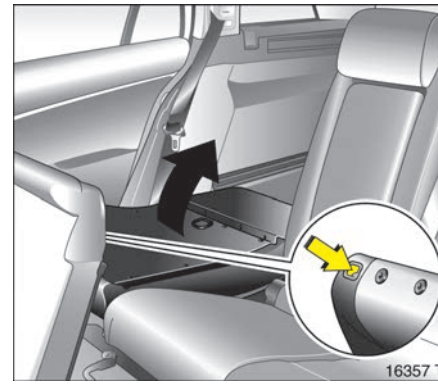
Make sure that the seatbelt is not pinched or damaged.

Make sure that the backrests audibly engage in an upright position.

Insert and adjust the head restraints in the backrests.

Attach the luggage compartment hooks to the rear head restraints.

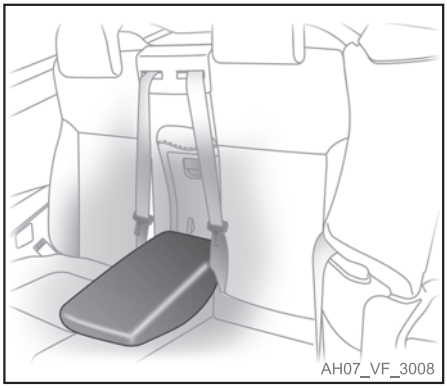
The three-point seatbelt for the centre rear seat can only be pulled from its inertia reel if the backrest is upright and properly engaged.



SEATS cont.

Rear seat centre arm rest (TwinTop)

Pull the armrest down from the top, pivot it down and position on the seat with the flat side up. The armrest is held in place on the backrest with a retaining strap. To fully remove the armrest, disengage the clip at the retaining strap.



Extending the luggage compartment (TwinTop)

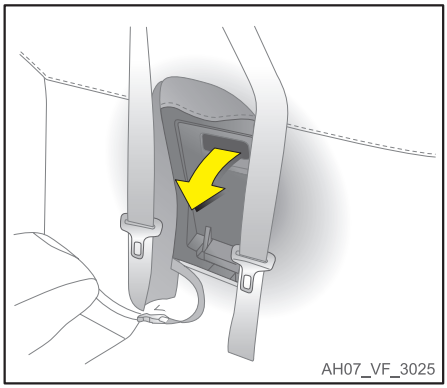
Pull out the armrest from the top.

The armrest is held in place on the backrest with a retaining strap. To fully remove the armrest, disengage the clip at the retaining strap.

Pull the handle and fold down the cover.

WARNING

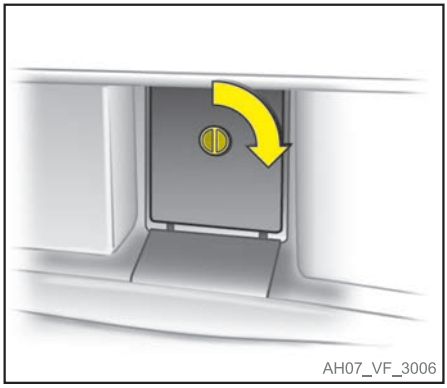
- The load must not hinder handbrake operation or gear shifting.
- Any load put through to the luggage compartment must not be any higher than the luggage compartment cover.



The cover behind the arm rest can be locked from inside the luggage compartment.

Locked = Handle horizontal

Unlocked = Handle vertical



SEAT BELTS

Lap-sash belts

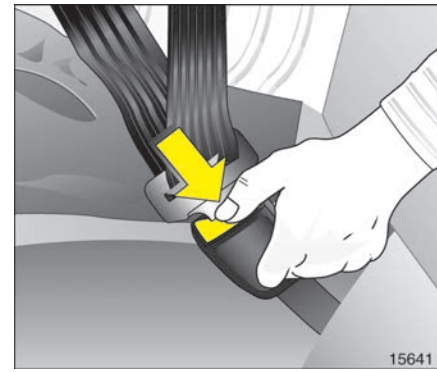
To put on a lap-sash seat belt, pull the belt across your body and clip the metal tongue into the buckle. The metal tongue locks safely into place with a click. Settle the belt at the hip, then tug the sash upward. Any extra belt length retracts automatically.

Wear the lap section as low as possible on the hips, not on the waist. Make sure the sash and lap sections of the seat belt fit firmly and are free from twists.

The emergency-locking retractor allows you to move freely while the vehicle is travelling normally. The belt immediately locks on fast braking, impact with a solid object or any quick movement by the wearer.

To undo the belt, press the release button on the buckle and allow the belt to retract. Check that it retracts fully without twisting.

Note For TwinTop In order to prevent the flutter noise caused by the rear seat belts when the roof and windows are open, the seat belts can be secured behind the rear arm rest when the rear seats are not occupied.

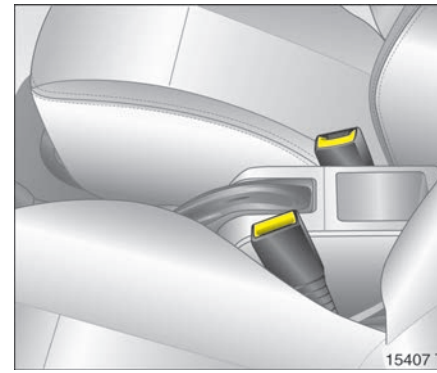


Seat belt pretensioners

The front seat belt system incorporates ‘once-only’ seat belt pretensioners. In the event of a moderate to severe front-on or rear-end collision, the belt buckles are pulled downwards, instantly tightening the diagonal and lap belts.

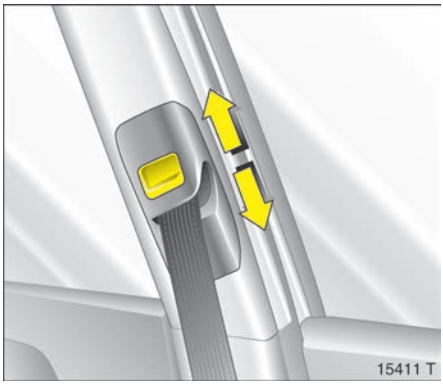
If the seat belt pretensioners are activated, the light illuminates. Yellow tabs are also displayed on the belt buckles.

Note If the belt pretensioners have been activated, they must be replaced by a Holden Dealer. However, the seat belts remain operational even when the belt pretensioners have been activated.



SEAT BELTS cont.

Seat belt height adjust (wagon and hatch)



Note Do not adjust the seat belt height while driving.

1. Pull the belt out a little.
2. Press the button down or push the belt guide up to the desired height.
3. Allow the anchorage to lock audibly into position.

Adjust the seat belt height so that the belt passes over the wearers shoulder and rests against the shoulder. It must not pass over the neck or upper arm. Shorter people should select a low belt guide position and taller people a high position.

Australian law requires that the driver and all passengers be properly restrained at all times with the seat belts provided in the vehicle. Failure to do so increases the chance of injury and/or the severity of injury in accidents.

Ensure that belts are not damaged or trapped by sharp-edged objects.

WARNING

- Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.
- Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.
- Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.
- It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious. Belts should not be worn with straps twisted.
- Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupants lap.
- No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

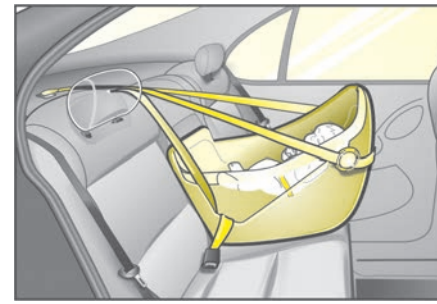
CHILD RESTRAINTS

Children should be restrained at all times and fitted with a child restraint appropriate to their size when travelling in a vehicle. Following are some guidelines about selecting the appropriate restraint for your child.

Infants

Rearward facing infant capsule	
WEIGHT	**HEIGHT**
Up to 9 kg*	Up to 70 cm*

Designed so that in the event of a collision, impact forces will be evenly spread over the baby's back, with minimal jarring to the vulnerable head and neck area.

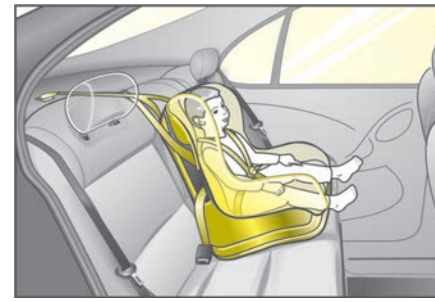


Rearward facing child capsule

Young children

Forward facing child seat
WEIGHT
8 to 18 kg*

For use when the child is able to sit and easily hold his or her head upright. It is also possible to purchase convertible seats which can be used as a rearward facing restraint or converted to a forward facing child seat.



Forward facing child seat

Booster seat with lap/sash seat belt
WEIGHT
14-26 kg*

**AS/NZ 1754:2004*

When children outgrow a typical forward-facing child seat, they are still too small for lap/sash seat belts. A booster seat raises the child so that the knees bend comfortably, the lap/sash seat belt is correctly positioned and the child can see out the window. A rigid booster seat with a back, side wings and sash guide gives the best protection. In assessing the range of children who would benefit from booster seats, height is a better indicator than age or weight.

Booster seat with lap/sash seat belt

Older children

A child should use a normal lap/sash seat belt only when:

- he/she can sit against the back of the rear seat with knees bent comfortably at the edge of the seat,
- lap belt rests low and snug across the hips – not across the stomach,
- sash belt is centred on shoulder and chest,
- he/she is able to stay seated like this for the entire trip.

Adult lap/sash seat belt

CHILD RESTRAINTS cont.

WARNING – EXTREME HAZARD

- Do not use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.
- NEVER install a child restraint in the front seat of a vehicle fitted with Side Impact Airbags (SIAB). Remember that it is safest for children to be seated in the rear seats.

Children should be restrained at all times when travelling in a vehicle.

Always ensure that the seat belt fits firmly around the child restraint. If a child cannot see out of the window, do not raise him/her by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

WARNING

- Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.
- Only child restraints that have clips to attach to the vehicle's anchorage fitting (as shown in the following illustrations) are to be used. Earlier types of child restraints may not attach securely to this type of anchor.
- Only Standards Australia approved child restraints and harnesses should be used. You should only purchase a child restraint which carries the appropriate Standards Australia sticker of approval.

CHILD RESTRAINTS cont.

Wagon and hatch

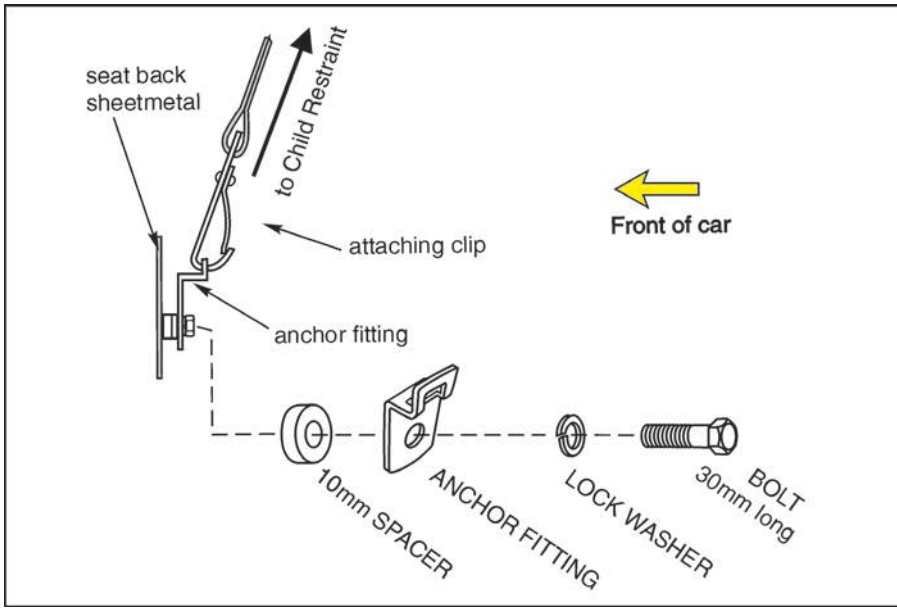
Three anchorage points are provided in the back of the rear seats.

One anchorage point is located in the centre position.

If you wish to use a child restraint in either of the outer positions:

1. Remove the cover plug.
2. Install an additional anchorage fitting, using the bolt, spacers and washer supplied with a child seat (as illustrated).
3. Ensure that the bolts (inner or outer positions) are securely tightened to 15-25 Newton metres (Nm).

   If unsure, consult your Holden Dealer.



CHILD RESTRAINTS cont.

TwinTop

Two anchorage points are provided on the forward wall of the luggage compartment. Access to these anchor points is through the luggage compartment when the roof is closed.

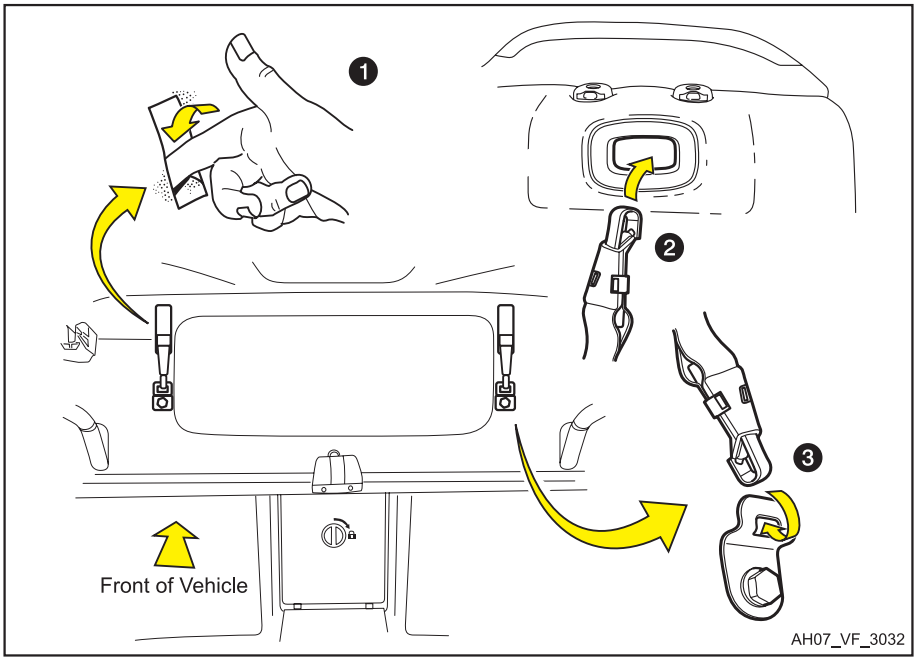
To attach the tether strap:

1. Close the roof. Refer to *TwinTop convertible hardtop* further on in this chapter.
3. Remove the rear seat head restraint on the side the child restraint is to be placed. Refer to *Rear head restraints* previously in this chapter.

   Note Removed head restraints should be stored in a safe location.
2. Open the luggage compartment.

   Note If fitting the tether strap for the first time to this vehicle, follow this procedure. From inside the luggage compartment, push the top of the perforated cut out ❶ in the lining inwards. This allows the tether strap to pass through into the luggage compartment. The cut out can be repositioned when not in use.
4. Thread the child restraint tether strap through the hole ❷ in the top of the rear seat.
5. From inside the luggage compartment guide the tether strap through the hole in the lining.
6. Attach the tether strap to the anchor fitting ❸.

WARNING
Do not allow the tether strap to become loose and hang into the luggage compartment.



AIRBAGS

Passenger airbag and child restraints

WARNING – EXTREME HAZARD

- Do not use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.
- Never install a child restraint in the front seat of a vehicle fitted with Side Impact Airbags. Remember that it is safest for children to be seated in the rear seats.

Do not touch any airbag system components or wires.

The wires are identified by yellow tape wrapping or yellow tubing; the connectors are also yellow.

Scrapping a vehicle that has an uninflated airbag can be hazardous. Consult your Holden Dealer.

Refer to *Child restraints* previously in this chapter.

The airbag systems and seat belt tensioners are monitored electronically.

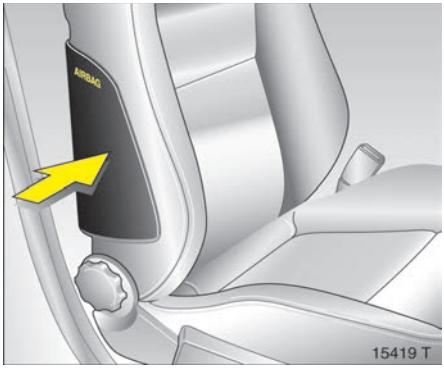
The light on the instrument panel illuminates briefly when the ignition is switched on. This indicates the airbags are operational.

If the light does not illuminate when the ignition is switched to on, or if it illuminates while driving, there is a fault in the airbag system or seat belt tensioners.

Contact your Holden Dealer as the airbags may not function correctly in an accident.

AIRBAGS cont.

Front and side impact airbags



Front impact airbags are fitted for the driver and front passenger and are identified by the word **AIRBAG** on the steering wheel and above the glovebox.

Side impact airbags, for the driver and front passenger, are stored in the side of the seat backrests closest to the door. Labels on the outer side of the front seat backrests indicate the position of the side impact airbags, (illustrated).

Front impact airbags operate as a pair and are deployed simultaneously. Side impact airbags are deployed independently.

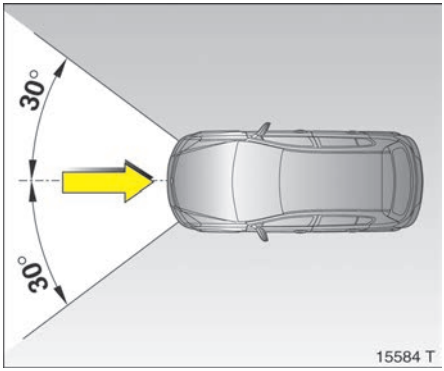
Airbags do not deploy in every accident. Various factors dictate whether they deploy including speed, angle of collision and object hit.

Note After use, the entire airbag system must be replaced. Have this work performed by your Holden Dealer. Have the system inspected by a Holden Dealer if the steering wheel or dashboard area is scratched, cracked or damaged. Remember that the horn pad must not be covered with adhesive or any other material, as this may hinder airbag operation. Keep the dashboard area clear for the passenger's side airbag. Ensure there is nothing around this area or hanging from the sun visor.

If your vehicle is involved in certain severe front-end collisions, the front airbags inflate, assisting the seat belts to restrain forward body movement. A side impact airbag will deploy in most, but not all, severe side impacts and will only deploy on the side of the vehicle that is struck.

You may hear an operating noise and a small amount of smoke-like gas is released. The gas is harmless and does not indicate malfunction or fire. The airbags then deflate; the whole process taking only a moment.

Note The airbags assist, but do not replace the seat belts. Front airbags are not designed to inflate if the vehicle is hit from the rear or side or if the vehicle overturns. Seat belts (by law) must be worn by all passengers whenever the vehicle is moving.



Front airbags may inflate if the vehicle is struck severely within the non-shaded section. They will not inflate if the vehicle is struck from the side, rear, or in some rollovers. Always wear a seat belt.

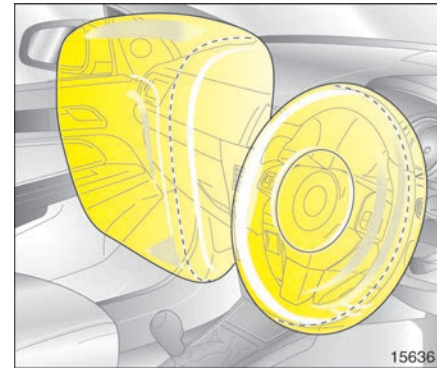
Airbags inflate rapidly and with great force. An inflating airbag in close proximity can seriously injure occupants. Seat belts help keep occupants in position in a crash and must be correctly adjusted.

Adjust the driver's seat to suit the driver's height so that the driver is sitting upright with slightly bent arms when holding the upper spokes area of the steering wheel.

Set the passenger seat as far back as possible, with the back rest upright.

AIRBAGS cont.

WARNING
If a side impact airbag (SIAB) is fitted, do not fit unauthorised seat covers. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat.



The electronics controlling the airbag system and belt pretensioners are located in the centre console. To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the console.

Extensive design and testing has gone into the airbag system. As a result, any careless or unskilled interference with the system could lead to its failure or to accidental inflation.

Any work to the electrical system, steering column, dashboard area, steering wheel or airbag system should only be carried out by an authorised Holden Dealer.

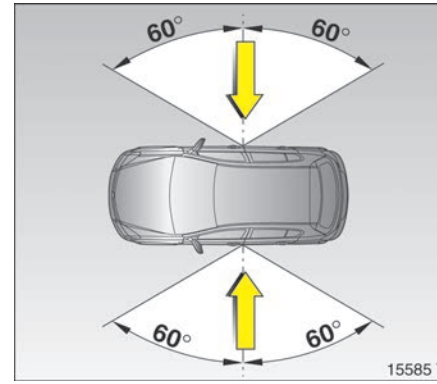
Side airbag note The side impact airbags deploy and offer protection in most, but not all, severe side impacts. Because of the limited time available to detect some side impacts, it is not possible to deploy the SIAB in all serious accidents (for example, some pole impacts).

Bull bar note Fitting a bull bar, or making other modifications to the front of the vehicle, may change the impact speed which would normally cause the airbag to inflate, reducing its effectiveness.

Do not fit bull bars to vehicles operating in suburban areas, as they increase the risk of injury to a pedestrian in the event of a collision.

Bull bars are only recommended for country or outback areas, where additional protection from straying animals is required.

Please remember that defensive driving and limiting driving speed to the road conditions is always the best approach, particularly where roadside signs indicate wildlife is abundant.



Side airbags may inflate if the vehicle is struck hard within the non-shaded section. Side airbags will not inflate if the vehicle is struck from the front, rear, or in some rollovers. Always wear a seat belt.

AIRBAGS cont.

Curtain airbags*

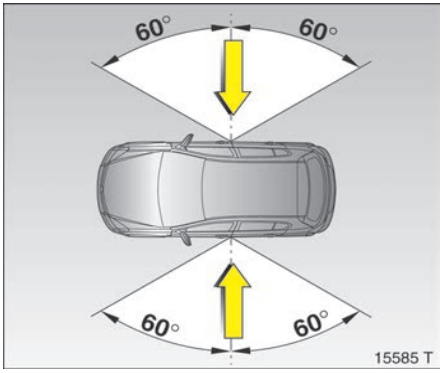
The curtain airbag system is identified by labels on the roof trim pillars.

The curtain airbag system comprises:

- An airbag with inflator in the roof frame on both the driver's and front passenger sides.
- Control electronics.
- Side impact sensors.
- The airbag system light in the instrument gauges.

The curtain airbag system is deployed:

- Depending on the type of impact.
- Within the range (illustrated) on the driver's door or front passenger door.
- Together with the side airbag system.
- Independently of the front airbag system.

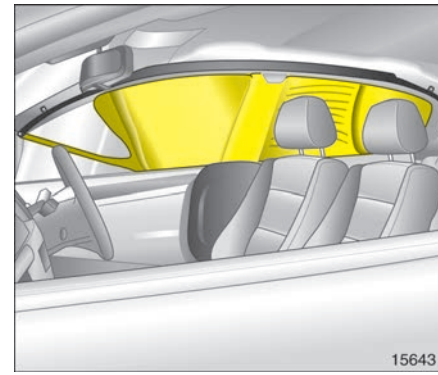


Curtain airbags may inflate if the vehicle is struck hard within the non-shaded section. Curtain airbags will not inflate if the vehicle is struck from the front, rear, or in some rollovers. Always wear a seat belt.

AIRBAGS cont.

When deployed, the curtain airbag inflates to form a safety cushion around the head area on the affected side of the vehicle.

This substantially reduces the risk of a head injury in the event of a side-on collision.



WARNING

- There must be no objects in the area in which the airbag inflates. Do not place hands or arms on the covers of the airbag systems.
- Use the hooks above the doors only to hang up light articles of clothing. Do not place any objects in the pockets of the hanging items. Do not hold onto the assist handles (above the doors) while seated in the vehicle.
- Seat belts must always be correctly fitted.

The curtain airbag is not deployed when:

- The ignition is switched off.
- A frontal collision occurs.
- The vehicle overturns in an accident.
- A rear impact collision occurs.
- A side impact collision occurs outside the passenger area.

The severity of a side impact determines whether the side airbag system needs to be triggered to protect the occupants of the vehicle.

The degree of damage to your vehicle and the resulting repair costs alone do not indicate the criteria for deployment of the airbags.

Contact your Holden Dealer as the airbags and/or seat belt pretensioners may not function correctly in the event of an accident.

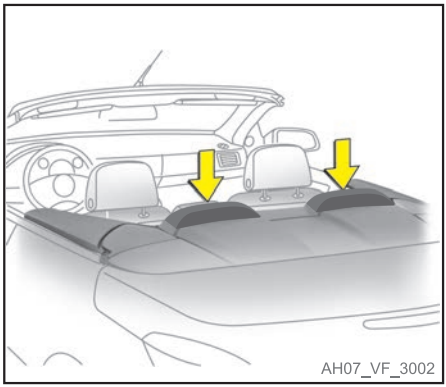
Please read the information on the previous pages relating to airbag systems fitted to your vehicle.

ROLLOVER PROTECTION SYSTEM*

The TwinTop is equipped with rollover protection with reinforced windscreen frame and anti-roll bars behind the rear seat head restraints. The anti-roll bars are deployed together with the front and side airbag systems depending on the severity of the impact.

In the event of a rollover, the anti-roll bars deploy upwards in a matter of milliseconds. They also deploy together with the front and side airbag systems, helping to optimise occupant protection. The system deploys whether the roof is open or closed.

Note Roof operation is not possible if the anti-roll bars are extended.



WARNING
Do not place any objects on the covers of the anti-roll bars behind the head restraints. They would be propelled through the vehicle in an uncontrolled fashion should the anti-roll bars deploy. Such objects could also prevent the anti-roll bars from extending.

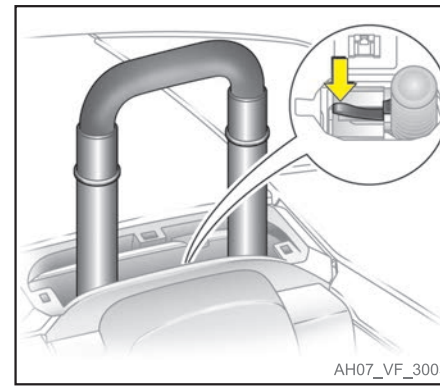
Control indicator for anti-roll bars

The anti-roll bars are monitored electronically together with the seat belt tensioners and the airbag systems. Their operational readiness is indicated by the control indicator in the instrument panel. When the ignition is switched on, the control indicator illuminates for approximately 4 seconds. If it does not illuminate, does not go out after 4 seconds or illuminates whilst driving, there is a fault in or deployment of the anti-roll bars, belt tensioners and airbag systems. The systems may fail to trigger in the event of an accident.

Deployment of the anti-roll bars is indicated by continuous illumination of .

ROLLOVER PROTECTION SYSTEM* cont.

Deployed anti-roll bars



Deployed anti-roll bars can be retracted (e.g. in order to close the roof after a collision).

Press the lever between the rods of an anti-roll bar to unlock the system. Push the anti-roll bar all the way down until it engages.

Repeat the procedure on the other anti-roll bar.

The control indicator , however, will remain illuminated and the anti-roll bars will not deploy in the event of another collision.

Note

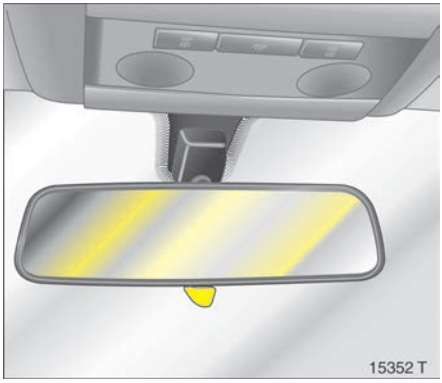
- Have the vehicle serviced by your Holden Dealer after the anti-roll bars have been deployed.
- The roof cannot be closed or opened if the anti-roll bars are extended. The anti-roll bars must first be retracted.
- If an attempt is made to operate the roof while the anti-roll bars are extended, a continuous tone will sound.
- Do not place any objects on the covers of the anti-roll bars behind the head restraints. They would be propelled through the vehicle in an uncontrolled fashion should the anti-roll bars deploy. Such objects could also prevent the anti-roll bars from extending.

MIRRORS

Interior rear view mirror

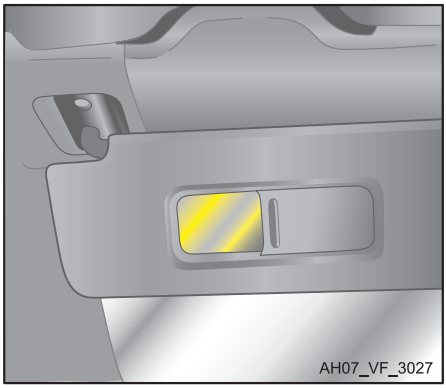
To adjust the rear view mirror, move the mirror right or left, up or down to gain the required angle.

The anti-glare lever on the lower edge of the mirror enables the reflector to be used during night driving. Swivel the lever to reduce night glare.



Illuminated mirror in the sun visors*

Slide the cover sideways to view the mirror. The lighting switches on when the cover is opened.



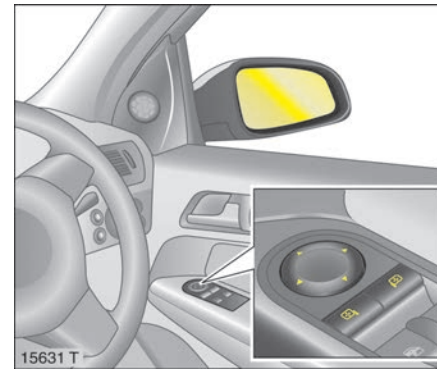
MIRRORS cont.

Electric exterior mirrors

Switch the top rocker switch to either left mirror or right mirror as required.

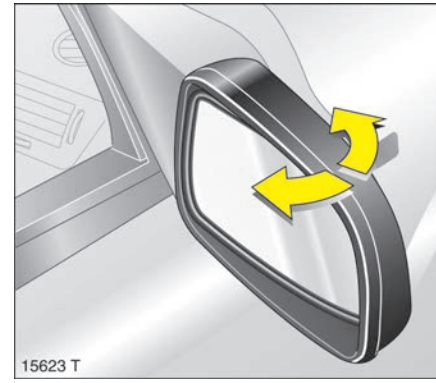
When the ignition is switched on, the larger, four-way knob (illustrated) can then be used to adjust the angle of the mirror.

Note The passenger-side exterior mirror is convex shaped, making objects appear further away than they actually are.



For the safety of passengers and pedestrians, exterior mirrors are released from their support under an accident-like impact. To realign mirrors, apply slight pressure to the mirror housing.

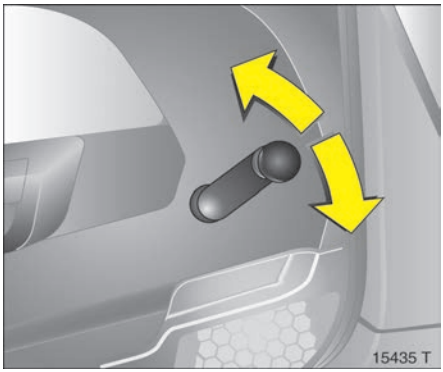
Demisting of the outside electric mirrors is provided when the rear window demister is switched on. Refer to *Ventilation* and *Air conditioning* sections in chapter 1A.



WINDOWS

Manual rear windows*

Turn the handle on the door to raise or lower the windows.

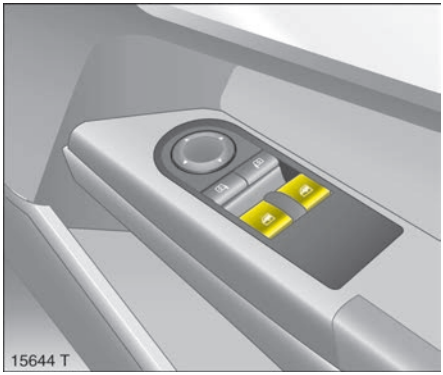


Electric windows

The main rocker switches for the electric windows are located in the driver's door.

Additional switches are located in the passenger door and rear doors*.

Remove the key from the ignition when leaving the vehicle to avoid risking injury to children (through incorrect use of electric windows, for example).



To operate the windows

To open fully, press the switch for more than one second.

To close fully, pull the switch for more than one second.

Note

- The auto up and auto down function only operates on the front windows.
- To stop the auto up and auto down function press or pull on the switch briefly.
- To operate the window in stages press or pull on the switch briefly.
- The windows can be operated within five minutes of switching the ignition on or off.

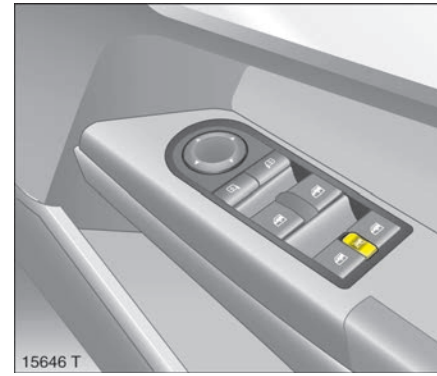
WINDOWS cont.

Rear safety switch*

The rear safety switch is located in the centre of the switch panel in the driver's door handle. It is used to deactivate the window switches in the rear doors.

Move the switch forward or backward. When the red section is visible, the rear windows cannot be operated with the rear door switches.

When the green section is visible, the rear windows can be operated with the switches on the rear doors.

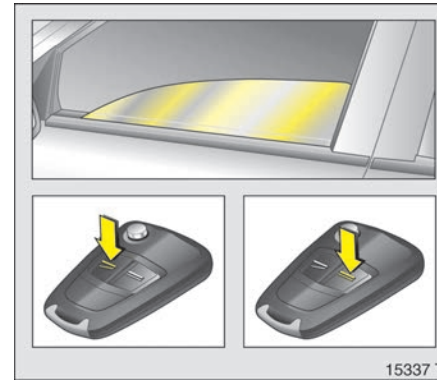


Closing electric windows – four electric windows only*

To close the electrically operated windows from outside the vehicle, hold the ⚌ button on the remote control until all windows are fully closed or closed to the desired position.

Opening electric windows from outside – four electric windows only*

To open the electrically operated windows from outside the vehicle, hold the ⚍ button on the remote control until the windows are opened to the desired position.

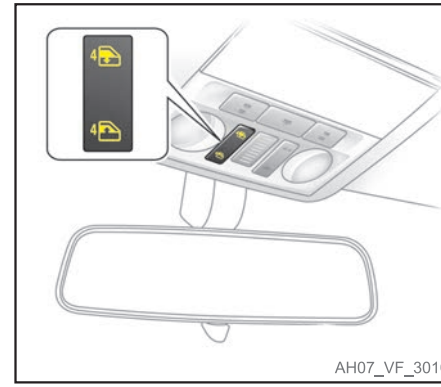


Central switch for electric windows (TwinTop)

Button ⛍ or ⛌ in the roof console.

Press button ⛌: all windows will close.

Press button ⛍: all windows will open.



WINDOWS cont.

Interruption of power supply

Full opening and closing of the windows is disabled after an interruption of the power supply (battery/fuse or low voltage).

To reactivate the windows:

- Close the doors.
- Switch on the ignition.
- Close the window and continue to keep the switch pressed for at least five seconds.

Repeat for each window. If the system is overloaded, the power supply is automatically cut off for a short time.

Safety function

If the window encounters resistance during closing, the window will stop its progress and immediately open again.

In the event of difficulty in opening the window due to frost, for example, press the relevant window switch several times until the window closes.

INTERIOR LIGHTS

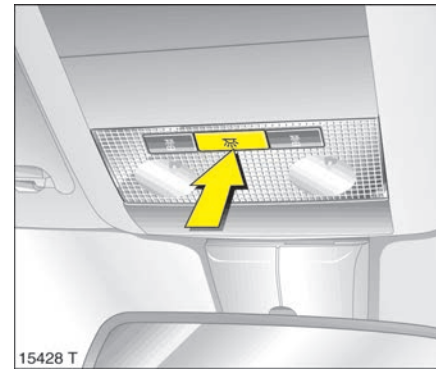
Front courtesy light*

After the doors are closed, the light is switched off after a delay.

Courtesy light when doors are closed:

On Press button .

Off Press button again.

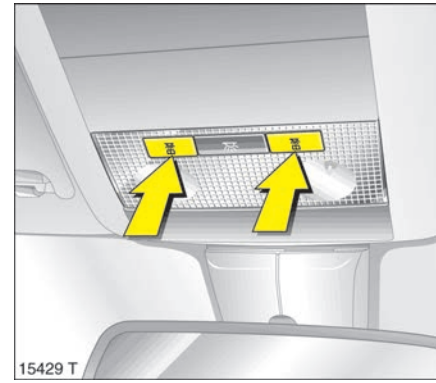


Front reading lights*

Left and right reading lights are individually operable. With ignition on:

On Press button .

Off Press button again.



INTERIOR LIGHTS cont.

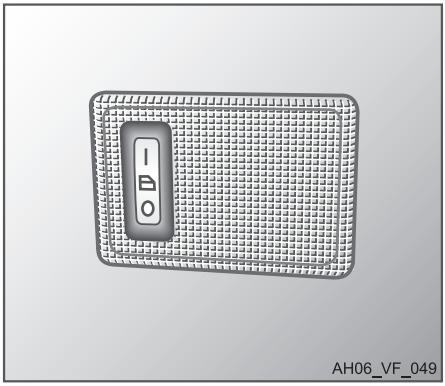
Front courtesy light*

Centre switch position: The front courtesy light illuminates when a door is open.

On Switch position 1.

Door Switch position centre.

Off Switch position 0.



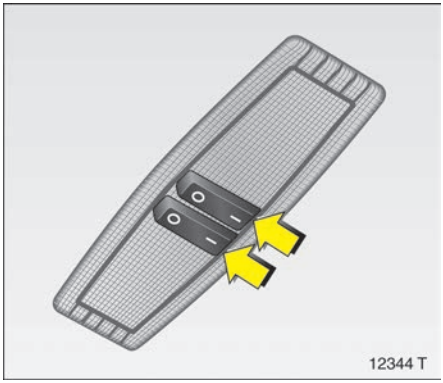
Courtesy lights and rear reading lights*

Centre switch position: The rear courtesy light illuminates together with the front one when a door is open.

The rear reading lights on the left and right can be switched on separately. With ignition on:

On Switch position 1.

Off Switch position 0.



Luggage compartment light

The luggage compartment illuminates when the hatch is opened.

Glovebox light

The glovebox light illuminates when the glovebox is open.

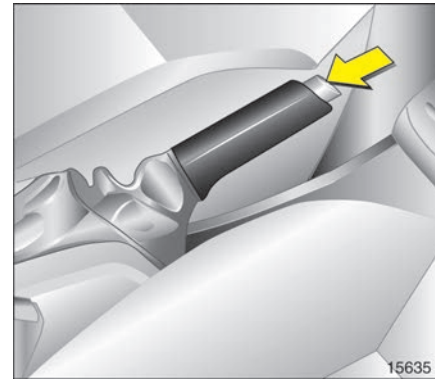
PARK BRAKE AND ACCESSORY SOCKETS

Park brake

To apply the park brake, pull the lever straight up.

To release the park brake, pull the lever slightly upwards, push and hold the release button on the end of the lever and lower the lever all the way down.

Never drive the vehicle with the park brake applied.



Accessory sockets

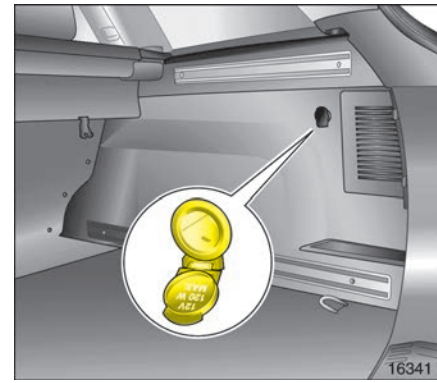
The vehicle is fitted with an accessory power socket located in the centre console.

Wagon only: An additional accessory power socket is located in the luggage compartment.

If an accessory is connected and the engine is not running the vehicle's battery may be discharged.

Note Any accessory device (mobile phone, car fridge, for example) connected to the power socket must not exceed a current draw of 10 amps.

WARNING
It is dangerous for the driver of the vehicle to attach or remove accessories whilst driving. It may distract the driver's attention, putting the occupants of the vehicle and other road users at risk.



CONVENIENCE FEATURES

GLOVEBOX

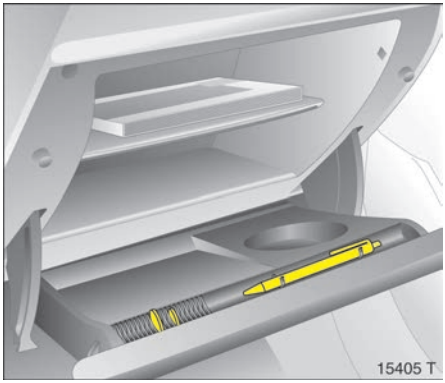
To open the glovebox, pull the handle upwards.

To close the glovebox push the lid shut.

The shelf* in the glovebox can be removed by pulling on the front edge.

To refit the shelf, slide into the guide strips and push until it engages in the rear panel.

There is a cup holder located on the inside of the glovebox lid. This cup holder should only be used when the vehicle is stationary.

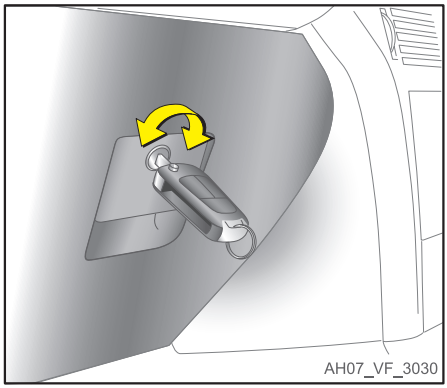


Glovebox lock*

To lock and unlock the glovebox use the ignition key.

Turn the key clockwise to lock.

Turn the key anti-clockwise to unlock.

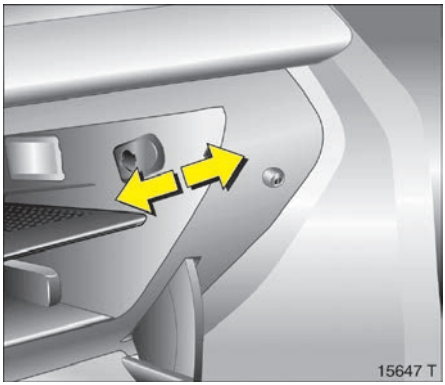


Glovebox cooling (ECC only)

Cooled air can be fed into the glovebox through a nozzle.

To cool the glovebox, slide the vent backward.

If glovebox cooling is not required, slide the vent forward.

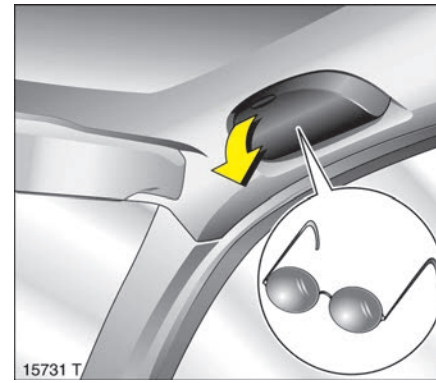


CONVENIENCE FEATURES cont.

SUNGLASSES HOLDER*

A storage compartment for glasses is located above the driver's side door. Fold down to open.

Note Do not store heavy objects in the sunglasses holder.

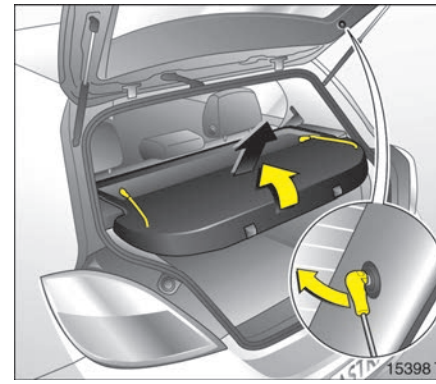


LUGGAGE COMPARTMENT COVERS

Hatch

To remove, unhook the restraining straps from the tailgate.

Pull the cover from the side guides.



TwinTop

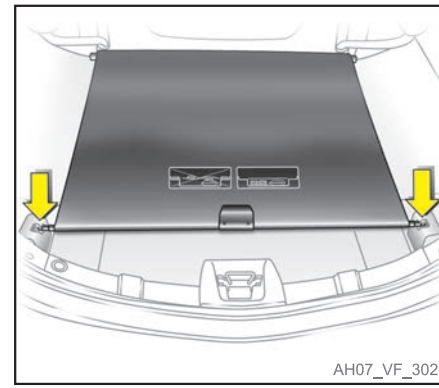
To open: Disengage the luggage compartment cover from the recess on the right and left. The blind rolls up automatically.

To close: Grasp the handle, pull the cover towards the rear of the vehicle and engage in the recess on the right and left.

Note Do not place any heavy or sharp edged objects on the cover.

There must be no objects outside of or on top of the luggage compartment cover when the roof is open or in the process of opening.

Note The roof can only be operated when the luggage compartment cover is closed.



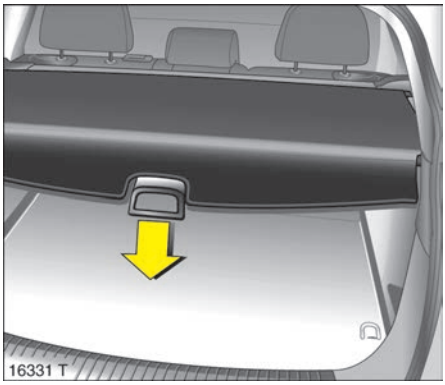
CONVENIENCE FEATURES cont.

Wagon

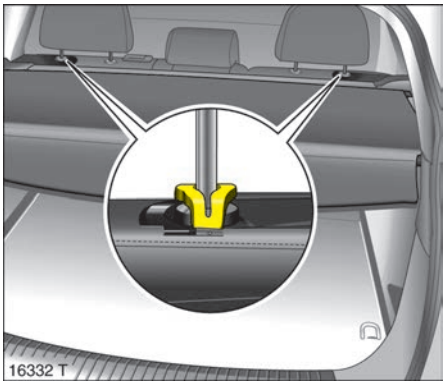
To open: Press the handle on the luggage compartment cover down. The cover automatically unrolls.

To close: Press the handle on the luggage compartment cover rearward. The cover automatically engages in its end position.

Note Do not place any heavy or sharp-edged objects on the cover.



To cover the gap between the luggage compartment cover and the rear seat backrests, there is a cover on the cartridge. Attach the two hooks of the cover to the head restraint guide rails.

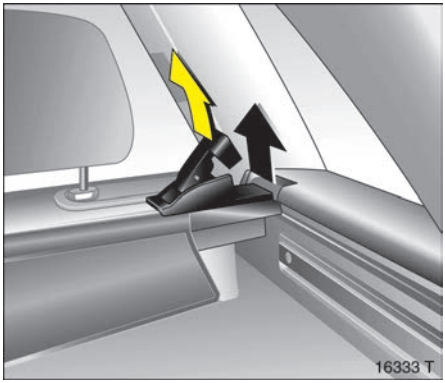


To remove: Open the luggage compartment cover and detach the hooks from the head restraints.

Move the release lever on the right-hand side of the luggage compartment upward. Lift the right side of the cover and remove from the brackets.

To install: Insert the luggage compartment cover in the recess on the left, press the release lever on the right-hand side upward, insert the cover in the recess on the right, engage and press down the lever.

Attach the hooks onto the head restraints.



*TWINTOP CONVERTIBLE HARDTOP**

WARNING

- Take care when operating the convertible hardtop. Risk of injury.
- Monitor the action zone above, to the side and to the rear of the vehicle during roof operation. Make sure that nothing could become pinched.
- Make sure no one is in the action zone of the roof or boot lid during roof operation. Risk of injury.
- Check the amount of height, length and width of available space before operating the roof, e.g. in a garage, parking garage or close to trees.
- Vehicle passengers must be informed accordingly.
- Before leaving the vehicle, remove the ignition key in order to prevent unauthorised operation of the windows and TwinTop roof.
- Make sure that any luggage in the boot does not exceed the height of the luggage cover, otherwise the roof or the luggage could be damaged.

OPERATING THE CONVERTIBLE HARDTOP

The convertible roof is operational when the key is in position 1 in the ignition switch.

Requirements for the TwinTop to be operational:

1. The vehicle must be stationary or driving no more than 30 km/h.
2. The luggage compartment cover must be closed and engaged. Refer to *Convenience features* previously in this chapter.
3. The boot lid must be closed.

If any of the requirements are not fulfilled, a warning tone sounds when the switch is actuated and the roof will not open or close.

Indicator and warning tones

- A warning tone is heard upon completed opening or closing of the convertible hardtop.
- A warning tone is heard upon completed raising or lowering of the electric luggage compartment loading aid. Refer to *Loading the vehicle* in chapter 9.
- A warning tone is heard if the boot lid is not closed during roof operation.
- A warning tone is heard if the boot lid is not fully open during operation of the luggage compartment loading aid.
- A warning tone is heard during roof operation if the vehicle speed exceeds 30 km/h.
- A warning tone is heard when vehicle speed exceeds 30 km/h if the roof is not fully open or closed.
- Three warning tones are heard during roof or loading aid operation if the luggage compartment blind is not attached.
- Continuous warning tones are heard during the roof operation if the anti-roll bars have been triggered.
- Continuous warning tones are heard starting one minute before the end of the 9-minute standby time with the roof in an intermediate position.
- Continuous warning tones are heard starting one minute before the end of the 9-minute standby time with the loading aid in the raised position.

TWINTOP CONVERTIBLE HARDTOP cont.*

OPERATING THE CONVERTIBLE HARDTOP cont.

Note

- Do not open the luggage compartment until the warning tone sounds, indicating the end of the roof opening or closing procedure.
- The luggage compartment cover must always be closed during roof operation.
- There must be no one at the covers behind the rear head restraints.
- There must be no objects in the pivot area or the roof or on the covers behind the rear head restraints.
- Operating the roof while travelling on uneven roads could lead to malfunction and damage.

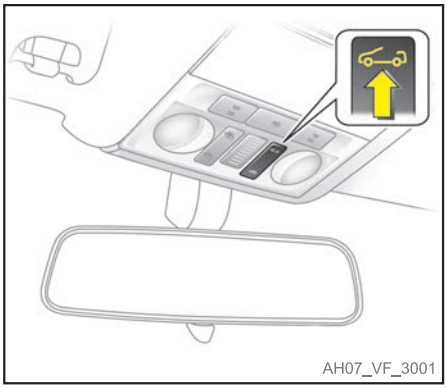
To open the roof

Note There must be no objects in front of the rear window or in the pivot area of the roof and boot lid.

Hold the button in the roof console depressed until the roof is completely open and the warning tone sounds indicating the boot lid is closed.

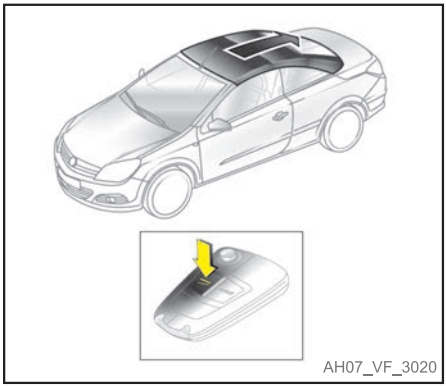
Note all the windows will automatically open slightly before the roof starts to open.

If the button is pressed again after the warning tone sounds, all the windows will close.


AH07_VF_3001

The roof can also be opened with the remote control when the vehicle is stationary. Unlock the vehicle. Press the unlock button again and hold depressed until the roof is completely open and the warning tone sounds indicating the boot lid is closed.

During operation with the remote control, the door windows are opened automatically.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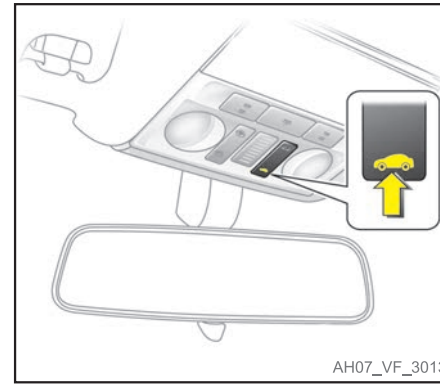
TWINTOP CONVERTIBLE HARDTOP cont.*

To close the roof



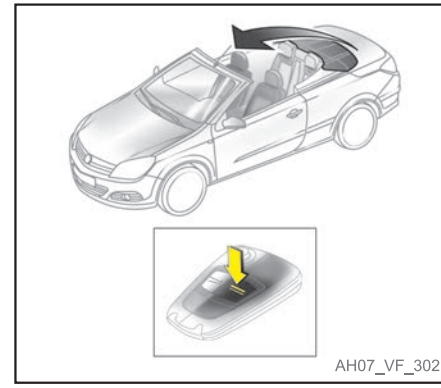
Note There must be no objects in the pivot area of the roof and boot lid.

Hold button in the roof console depressed until the roof and boot lid are completely closed and the warning tone sounds.

Note All the windows will automatically open slightly before the roof starts to close.

If button is pressed again after the warning tone sounds, all the windows will close.

The roof can also be closed with the remote control when the vehicle is stationary. Lock the vehicle. Press the lock button again and hold depressed until the warning tone sounds indicating the roof and boot lid are completely closed.



Intermediate positioning of roof

The roof can be held in an intermediate position for approximately 9 minutes to facilitate cleaning of roof spaces.

This is done by holding either or button in, then releasing it when the roof is in the required position.

Note If the roof is open, use button to set the intermediate roof position. If the roof is closed, use button to set the intermediate roof position.

One minute before the end of this period, a continuous tone sounds as a warning that the hold period is almost over and the roof could start to move.

Operating problems

If the roof is not operating correctly check the following points:

- the luggage compartment cover is engaged in the closed position,
- the boot lid is completely closed,
- there is sufficient battery voltage,
- there is a system overload.

Note If the automatic drive is not operational, two people are required to manually close the roof. The tools and instructions required for manual closing of the TwinTop are stored in the glovebox. If unsure about the manual closing procedure contact your Holden Dealer.

TWINTOP CONVERTIBLE HARDTOP cont.*

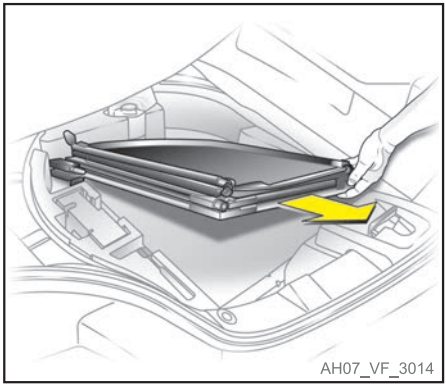
WIND DEFLECTOR

With the wind deflector installed, turbulence, draughts and noise in the passenger compartment are reduced when the roof is open.

The wind deflector is stored in the luggage compartment.

Note

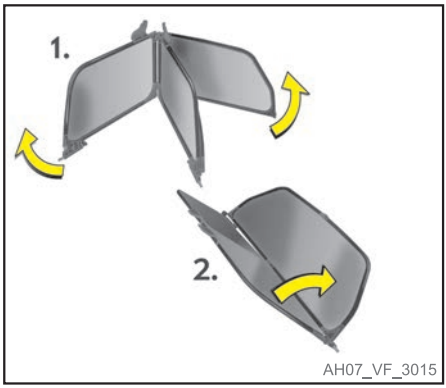
- The rear seats cannot be occupied when the wind deflector is in place.
- Do not place any objects on the wind deflector.



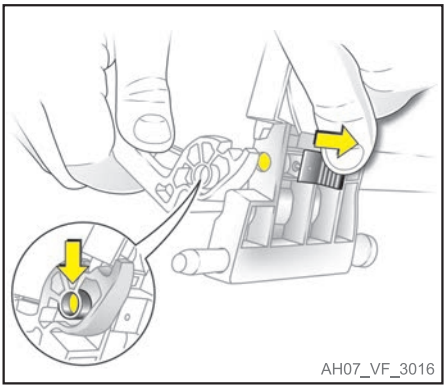
Fitting

Take the wind deflector from the luggage compartment.

Expand the collapsed wind deflector as illustrated.

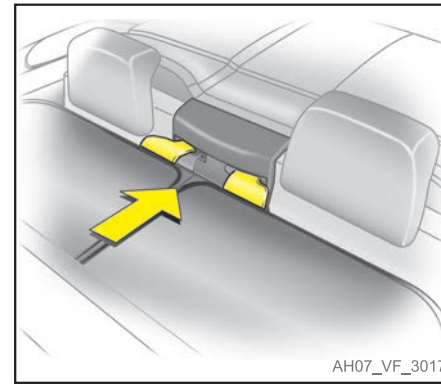


Join together the unfolded ends of the wind deflector: press in the pin at the slider, guide the hinge over the pin and release the slider so that the pin engages in the hinge.

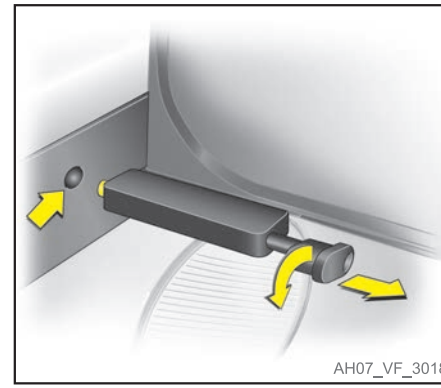


TWINTOP CONVERTIBLE HARDTOP cont.*

Insert the guide clips of the wind deflector in the seat belt recesses between the rear head restraints.



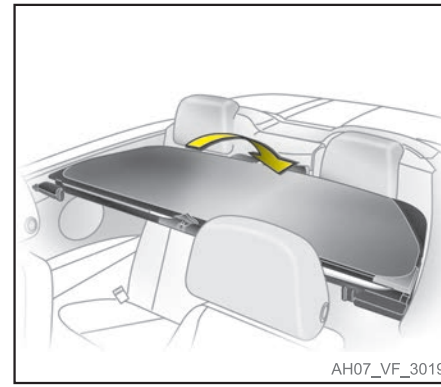
Pull the toggle of the right and left locking pin and turn to lock. Straighten out the wind deflector, turn the toggle back and engage the locking pin in the recess in the side trim.



The wind deflector can be folded back when not in use.

If the wind deflector is folded and the rear seats are unoccupied, the wind deflector can remain mounted in the vehicle when the roof is closed.

Reverse the procedure to remove. Store the wind deflector in the luggage compartment.



ELECTRICAL SYSTEM WARNING

WARNING

Your vehicle is equipped with a highly sophisticated, electronically controlled electrical system called CANBus. This system constantly checks connected components in the vehicle for correct operation.

To carry out its designed functions, CANBus needs to recognise all the electrical equipment in the vehicle, including any aftermarket electrical equipment or accessories (for example, a tow bar harness or an integrated mobile telephone). This requires all of these components to be connected to the electrical system via purpose built interfaces. For Holden approved parts and accessories and some other non-approved parts and accessories, these interfaces are available from your Holden Dealer. Failure to use the correct interfaces may affect CANBus performance or cause damage to your equipment and/or to the vehicle. Such failure may also affect your New Vehicle Warranty to the extent that Holden considers it affects the specifications or quality of your vehicle.

In order to ensure the correct function of CANBus, Holden recommends that Holden approved parts and accessories are fitted by your Holden Dealer. The use of non-approved parts and accessories may affect the correct function of CANBus and an interface for such parts and accessories may not be available from your Holden Dealer. This may also affect your New Vehicle Warranty to the extent that Holden considers that it affects the specifications or quality of your vehicle.

In addition, you may need to visit your Holden Dealer to have CANBus reconfigured with a Tech 2 diagnostic tool to have the system recognise your new equipment. Please contact your Holden Dealer for details.

Provided the combined load of such equipment does not exceed 30 amps, minor equipment can be safely connected via the accessory socket in the front console and the rear compartment (wagon only).

NOTES

CHAPTER 4

Driving

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*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

ENGINE STARTING

1. Apply the park brake firmly and release only after you have started the engine and are ready to drive off.
2. **Manual**: Press the clutch pedal and move the shift lever to the N (neutral) position. Release the clutch pedal.

   Automatic: Move the shift lever to P (park) or N (neutral) position to start the engine.

   Note To move the shift lever away from P (park), the ignition must be on and the brake pedal pressed.
3. Start the engine, as outlined, with your foot off the accelerator.

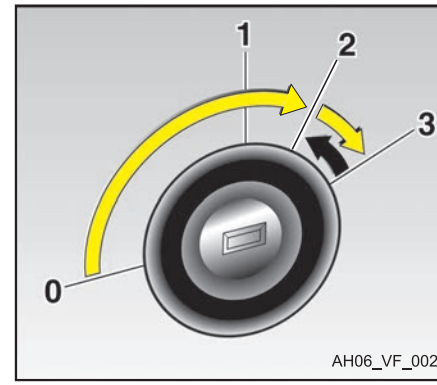
   Petrol engine: Turn the key to the start position (**3**) and release the key when the engine starts.

   Diesel engine: Turn key to **2**, when control indicator goes out turn the key to the start position (**3**) and release the key when the engine starts.

   Note Diesel preheating system switches on only if outside temperature is low.

   To switch on the ignition, only turn the key to **2**.

   For cold or hot starting, the procedure is the same.



Do not press the accelerator pedal prior to, or during, starting. Pressing the accelerator pedal only increases cranking time and does not help the engine start.

If the engine does not start and the check engine warning light () on the instrument panel flashes, switch the ignition off for at least 2 seconds before attempting to start the engine again.

If the engine still fails to start, consult a Holden Dealer.

Turbo* operating precaution, engine starting

Do not operate the engine above idle before the normal engine oil pressure has been established (such as applying full throttle immediately upon initial start-up). This causes the turbocharger to operate at excessive speed before the bearings receive adequate lubrication. Operation of the turbocharger for a period as short as five seconds without sufficient oil can cause bearing failure.

Running-in (for the first 1,000 km)

Drive your vehicle at various speeds. Do not use full throttle and never allow the engine to labour.

Make good use of all gears. Press the accelerator pedal a maximum of around three quarters of the available pedal travel.

Unless necessary, try not to brake too hard during the first 200 km or after new brake pads have been fitted.

ENGINE STARTING cont.

Switching off the engine

If the engine temperature is very high (for example, after driving in hilly areas) allow the engine to idle for approximately 2 minutes (in order to prevent heat accumulation) before switching off the engine.

If the engine temperature is still high, the cooling fan may remain on for several minutes after turning off the ignition.

Turbo charged engines*

Flow-generated noises may be audible if the accelerator is released quickly on account of airflow in the turbocharger.

SAFETY

Before entering the vehicle

- Check windows, mirrors and lights are clean.
- Check the tyres are not flat.

Before driving off

1. Ensure all doors are secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. Fasten seat belts.
5. Check the warning indicators illuminate briefly when you turn the key to start the engine. Refer to *Warning/reminder indications* in chapter 1A.

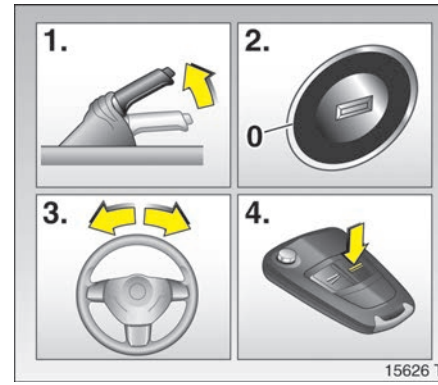
   Automatic only – Have the ignition on and press the brake pedal before moving the shift lever away from the **P** position.
6. Ensure that the roof is completely open or closed.

Parking

1. Apply the park brake.
- **Automatic transmission** – Place in **P** (park).
- **Manual transmission** – Place in first or reverse gear.

2. Turn the ignition key to lock (**0**) and remove the key.

   Note On automatic vehicles, the shift lever must be in park before the key can be removed.
3. Lock steering wheel.
4. Lock all doors and set the deadlock, if appropriate. Refer to *Deadlocking* in chapter 2.



WARNING

- Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.
- Never leave the engine running in an enclosed space, such as a closed garage or underground car park.

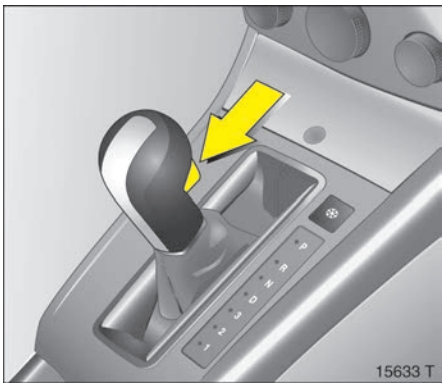
*4 SPEED AUTOMATIC TRANSMISSION (PETROL)**

The shift lever can only be moved from **P** when the ignition is switched on and the foot brake is pressed (shift lever lock).

To engage **P** or **R**, press the button on the shift lever.

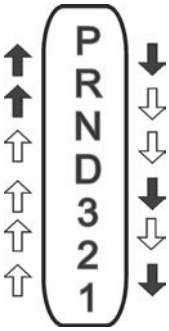
The engine can only be started with the shift lever in position **P** or **N**. When position **N** is selected, press the foot brake or engage the handbrake before starting.

Do not accelerate during the selection procedure.



Push in the button when shifting into any position indicated by the black arrow (illustrated).

Move the shift lever (without pushing in the button) into any position marked by the outline arrow (illustrated).



After starting the engine and before shifting into a gear, press the brake pedal. If the brakes are released when a gear is engaged, the vehicle will “creep”. Do not actuate the accelerator and brake pedals simultaneously.

WARNING
Disregarding these instructions may lead to injuries or endanger life.

D can almost always be used for driving.

If the accelerator pedal is pressed gently and evenly, the transmission will shift into the fuel-saving gears at an early stage. The drive range needs to be changed manually only in exceptional cases. Select **3**, **2** and **1** only when automatic shifting up is to be avoided or if additional use is to be made of the engine braking effect.

Select **D** again as soon as driving conditions permit.

4 SPEED AUTOMATIC TRANSMISSION (PETROL) cont.*

Transmission display

The selected gear position is displayed in the transmission display.

P Park position.

R Reverse gear.

N Neutral or idling position.

D Automatic mode.

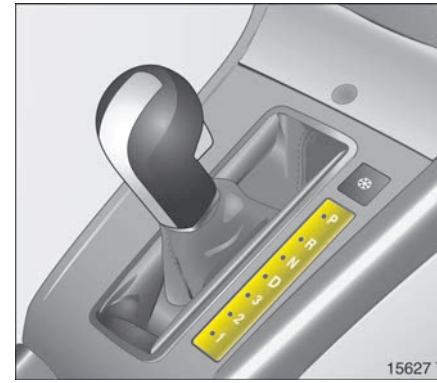
1-3 Current gear.

Selector lever in P, R and N

P Park position. Front wheels are blocked. Use only with vehicle stationary and the handbrake applied. '**P**' appears in the transmission display.

R Reverse. Engage only with vehicle stationary. **'R'** appears in transmission display.

N Neutral position. '**N**' appears in transmission display.



Drive ranges D, 3, 2, 1

D Drive position for normal driving conditions in first to fourth gear.

3, **2**, **1** Transmission does not shift above the selected gear.

Press the button on the shift lever to engage **3** or **1**.

The gear selector position is indicated in the transmission display. When in **D**, the current gear is also displayed.

4 SPEED AUTOMATIC TRANSMISSION (PETROL) cont.*

P (park) This gear stops the front wheels from turning and therefore should be selected (together with the park brake) when leaving the vehicle. Never select **P** until your vehicle is fully stopped. Ensure the brake pedal is pressed and the ignition on before the shift lever can be moved away from the **P** position.

R (reverse) Never select **R** until your vehicle is fully stopped. Reversing lights operate when **R** is selected and the ignition is on. After reversing, make sure the vehicle has fully stopped before selecting a forward gear.

N (neutral) This gear is the out-of-gear position. You can restart a stalled engine while the vehicle is still moving or stopped.

D (fourth) This gear is the most effective position for normal or freeway driving. This position gives maximum fuel efficiency, as the transmission can choose the appropriate gear (**1** through to **4**) for the load and driving conditions.

3 (third) This position is most effective when overtaking and gives responsive acceleration and deceleration, especially in hilly areas. This position allows the transmission to shift between first, second and third gear as conditions require. **D** (fourth gear) is excluded.

2 (second) Use this position when going down a steep gradient to avoid excessive use of the brakes. The transmission will shift between first and second gear as required. Move the lever back into the **D** position to return to normal driving.

1 (first) Use this position when strong braking effect is needed down a very steep gradient. Remember to move the shift lever back to the **D** position so that the transmission can shift into higher gears.

If first gear is selected at too high a speed, the transmission remains in second gear until you have slowed down sufficiently.

Note

- If selecting a lower gear than **D** while driving, ensure vehicle speed is sufficiently reduced beforehand.
- Do not press the accelerator pedal in either **1**, **2**, **3**, **D** or **R** when the brakes are applied. This overheats the transmission.
- Do not use the accelerator pedal to hold the vehicle on a slope. Use the brakes.
- Do not coast the vehicle in **N**. This lessens your control and negates engine braking power.
- Refer to *Under bonnet checks* in chapter 7, when checking the automatic transmission fluid level.

  Note The engine will not start unless the selector is in **P** or **N**.
- **Neutral idle control:** (4 speed only) This feature is designed to reduce fuel consumption when idling and stationary.

  Neutral idle control electronically switches the transmission into neutral (without you having to move the shift lever) when the engine is idling in a forward gear (**1**, **2**, **3**, **D**) and the brake is pedal pressed. When the brake pedal is released (to move from stationary) the transmission electronically switches back to the selected position of the shift lever.

4 SPEED AUTOMATIC TRANSMISSION (PETROL) cont.*

Winter program

Starting on slippery roads can be difficult. Press button ❄ to help prevent wheel spin. This button can be operated in **P**, **R**, **N**, **D** and **3**. When activated, ❄ illuminates in the transmission display and the vehicle starts in third gear.

The winter program is switched off by:

1. Pressing button ❄ again.
2. Shifting to **2** or **1** manually.
3. Turning off the ignition.

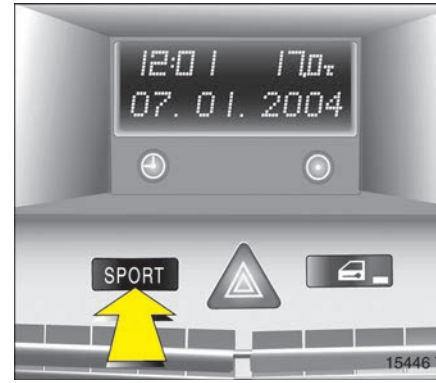
In order to prevent damage, the winter program switches off automatically at high transmission temperatures.

Sport mode

Sport mode is used to change the shift point of the automatic transmission while driving.

Shifting times are reduced and gear shifting occurs at higher engine speeds (unless cruise control is on).

To activate sport mode



Press the **SPORT** button. The LED in the button illuminates. The control indicator Ⓢ also illuminates.

Sport mode cannot be activated if the Winter program ❄ is active.

To deactivate Sport mode

Press the **SPORT** button again or switch off the ignition. The LED in the button goes out.

Sport mode is deactivated when the Winter program ❄ is activated.

*6 SPEED AUTOMATIC TRANSMISSION (DIESEL)**

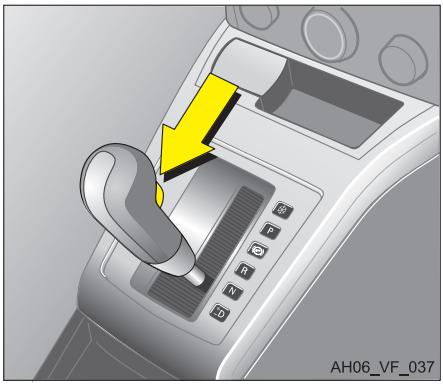
The shift lever can only be moved from **P** or **N** when the ignition is switched on and the foot brake is pressed (shift lever lock). When the shift lever is in the **N** position the shift lever lock is activated after a short delay and only if the vehicle is stationary.

To engage **P** or **R**, press the button on the shift lever.

The engine can only be started with the shift lever in position **P** or **N**. When position **N** is selected, press the foot brake or engage the handbrake before starting.

Do not accelerate during the selection procedure.

After starting the engine and before shifting into a gear, press the brake pedal. If the brakes are released when a gear is engaged, the vehicle will “creep”. Do not actuate the accelerator and brake pedals simultaneously.



WARNING
Disregarding these instructions may lead to injuries or endanger life.

Shift lever in P, R and N

P Park position. Front wheels are blocked. Use only with vehicle stationary and the handbrake applied. **‘P’** appears in the transmission display.

R Reverse position. Engage only with vehicle stationary. **‘R’** appears in the transmission display.

N Neutral position. **‘N’** appears in the transmission display.

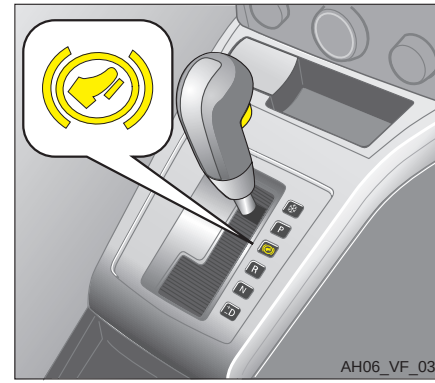
D Drive position for normal driving conditions in first to sixth gear. **‘D’** appears in the transmission display and the current gear.

M Manual mode for manual shifting. **‘M’** appears in the transmission display and the current gear.

6 SPEED AUTOMATIC TRANSMISSION (DIESEL) cont.*

Shift lock indicator

In position **N** or **P** the shift lock indicator illuminates red if the shift lever is locked. If the shift lock indicator illuminates apply the brake and attempt shifting again.



Manual mode

Move the shift lever to the left side gate when in position **D** for manual mode operation.

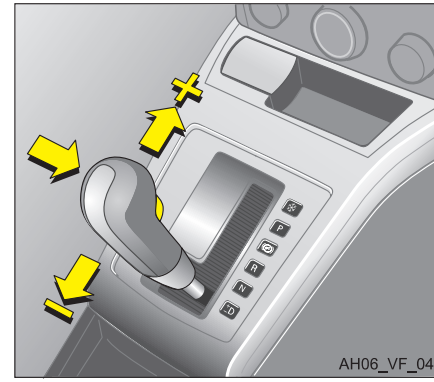
+ To shift up gears.

- To shift down gears

If a higher gear is selected at a speed that is too slow or a lower gear is selected at a speed that is too high, the gear will not be changed. This prevents the engine revs from being too low or too high.

If the engine revs are too low or high the transmission automatically shifts to a lower or higher gear, but not unless a certain speed has been reached.

Note For safety reasons automatic kickdown is still available in manual mode.



6 SPEED AUTOMATIC TRANSMISSION (DIESEL) cont.*

P (park)	This position stops the front wheels from turning and therefore should be selected (together with the park brake) when leaving the vehicle. Never select **P** until your vehicle is fully stopped. Ensure the brake pedal is pressed and the ignition is on before the shift lever can be moved away from the **P** position.
R (reverse)	Never select **R** until your vehicle is fully stopped. Reversing lights operate when **R** is selected and the ignition is on. After reversing, make sure the vehicle has fully stopped before selecting a forward gear.
N (neutral)	This is the out-of-gear position. You can restart a stalled engine while the vehicle is still moving or stopped.
D (automatic mode)	This position is most effective for normal or freeway driving. This position gives maximum fuel efficiency, as the transmission can choose the appropriate gear (**1** through to **6**) for the load and driving conditions.
M +/- (manual mode)	This position allows the driver to select the correct gear manually for the driving conditions. The higher gears (**4**-**6**) can be used for freeway driving or overtaking. The lower gears (**1**-**3**) can be used for climbing hills or going down steep gradients to avoid excessive use of the brakes.

Note

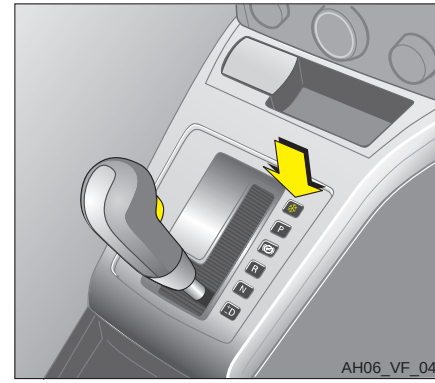
- Do not press the accelerator pedal in either **R**, **D** or **M** when the brakes are applied. This overheats the transmission.
- Do not use the accelerator pedal to hold the vehicle on a slope. Use the brakes.
- Do not coast the vehicle in **N**. This lessens your control and negates engine braking power.
- Refer to *Under bonnet checks* in chapter 7, when checking the automatic transmission fluid level.

  Note The engine will not start unless the selector is in **P** or **N**.
- **Neutral idle control**: This feature is designed to reduce fuel consumption when idling and stationary (6 speed diesel automatic only).

  Neutral idle control electronically switches the transmission into neutral (without you having to move the shift lever) when the engine is idling in a forward gear (**D** and **M**) and the brake pedal pressed. When the brake pedal is released (to move from stationary) the transmission electronically switches back to the selected position of the shift lever.

6 SPEED AUTOMATIC TRANSMISSION (DIESEL) cont.*

Winter program



Starting on slippery roads can be difficult. Press button **T** to help prevent wheel spin. This button can be operated in **P**, **R**, **N**, **D**. When activated, ❄ illuminates in the transmission display and the vehicle starts in third gear.

The winter program is switched off by:

1. Pressing button ❄ again.
2. Shifting to manual mode.
3. Turning off the ignition.

In order to prevent damage, the winter program switches off automatically at high transmission temperatures.

Sport mode

Sport mode is used to change the shift point of the automatic transmission while driving.

Shifting times are reduced and gear shifting occurs at higher engine speeds (unless cruise control is on).

To activate sport mode

Press the **SPORT** button. The LED in the button illuminates. The control indicator Ⓢ also illuminates.

Sport mode cannot be activated if the Winter program ❄ is active.

To deactivate sport mode

Press the **SPORT** button again or switch off the ignition. The LED in the button goes out.

Sport mode is deactivated when the Winter program ❄ is activated.

*MANUAL TRANSMISSION**

5 Speed

This system has five forward gears and one reverse gear. The shift pattern is located on the top of the gear shift lever.

Note When selecting fifth gear you must move the shift lever sideways against light spring pressure in order to select the gear.

6 Speed

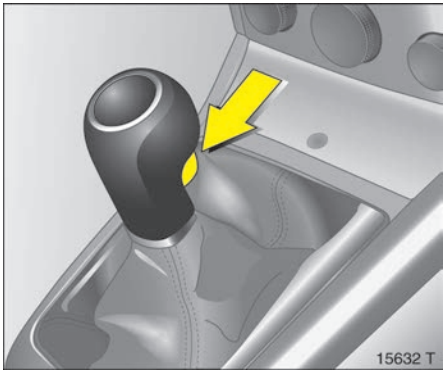
This system has six forward gears and one reverse gear. The shift pattern is located on the top of the gear shift lever.

Reverse gear

To select reverse gear, lift the knob on the gear shift lever and move the lever into the reverse position.

If the gear does not engage easily try the following:

- Release and press the clutch pedal.
- Try moving to another gear.



Operating notes

- When shifting from one gear to another, be sure to press the clutch pedal fully to avoid clashing and possible chipping of the transmission gears.
- Never attempt to select reverse gear until the vehicle has completely stopped. A slight pause (a few seconds) between pressing the clutch pedal and selecting reverse gear is desirable to allow all the rotating components to stop and avoid gear clashing. Whenever reverse gear is selected with the ignition on, the reversing lights illuminate.
- Move the shift lever with a moderate effort to allow time for the transmission synchronisers to work properly.
- Driving with your foot resting on the clutch pedal causes substantial clutch wear.
- When stopped on an incline, do not hold the vehicle by slipping the clutch. Use the brakes.
- Shift into a lower gear before starting a descent.
- To maintain safe speeds on a steep downgrade, shift down to the next lowest gear to reduce brake wear and engine overheating.
- Do not overspeed the engine when shifting down to the next lowest gear.

ANTI-LOCK BRAKE SYSTEM

The Anti-lock Brake System (ABS) continuously monitors the vehicle's brake system and prevents the wheels from locking, irrespective of the road conditions and tyre grip. It regulates the braking effect as soon as the wheels show a tendency to lock. You can still steer the vehicle even in the event of panic braking, for instance on bends or when swerving to avoid an obstacle.

WARNING
Do not let this special safety feature tempt you into taking risks when driving.
Traffic safety can only be achieved by adopting a responsible driving style.

In an emergency braking situation keep full force on the brake pedal without pumping it. Pumping the brake pedal can reduce brake efficiency when ABS is controlling the braking.

The braking effect is regulated every millisecond by the ABS.

When your vehicle is in a critical braking condition ABS is noticeable through pulsing of the brake pedal and the noise of the regulation process.

Shortly after ABS operation, the system performs a self check which may be audible.

The ABS warning light illuminates for a few seconds when the ignition is switched on and when performing a self check.

If it does not extinguish, or if it illuminates when driving, there is a defect in the ABS.

The vehicle's brake system remains operational but without ABS assistance. Consult your Holden Dealer as soon as possible.

*ELECTRONIC STABILITY PROGRAM (ESP®)**

ESP® improves driving stability when necessary in any driving situation regardless of the type of road surface or tyre grip. It also prevents the drive wheels from spinning.

The system monitors vehicle movements. As soon as the vehicle starts to swerve (understeers/oversteers) engine output is reduced (the sound of the engine changes) and individual wheels are specifically braked. This considerably improves the driving stability of the vehicle on snow and ice and on wet or slippery road surfaces.

ESP® is ready for operation as soon as the ignition is switched on and control indicator goes out.

When the ESP® comes into action, flashes.

The vehicle is now in a critical situation; ESP® allows you to keep control of the vehicle and reminds you to match your speed to the road conditions.

WARNING
Do not let this special safety feature tempt you into taking risks when driving.
Traffic safety can only be achieved by adopting a responsible driving style.

Control indicator

Illuminates for a few seconds when the ignition is switched on. The system is now ready for operation.

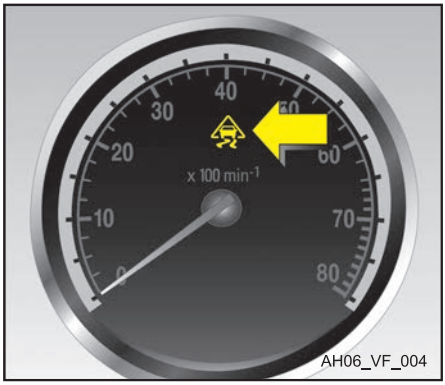
Flashing during driving

This shows the system has come into action. The engine output may be reduced (the sound of the engine changes) and the vehicle may be braked automatically to a small degree.

Illuminates while driving

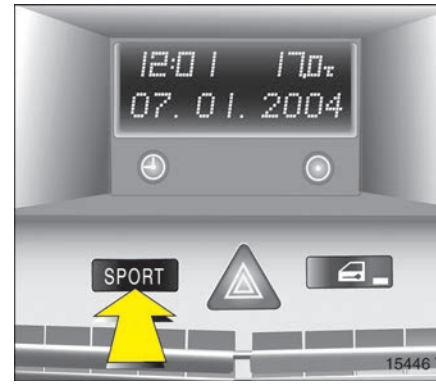
The system is switched off or a fault is present. Continued driving is possible. The driving stability can however deteriorate depending on road surface conditions.

Reactivate ESP® or have the cause of the fault remedied. We recommend that you consult your Holden Dealer.



ELECTRONIC STABILITY PROGRAM (ESP®) cont.*

Switching off*



Note ESP® is only able to be disengaged on vehicles with a manual transmission.

With SPORT mode* engaged (LED in **SPORT** button illuminated), the ESP® can be disengaged for sports performance.

Hold the **SPORT** button depressed for around 4 seconds. Control indicator will illuminate. **ESP® off** will also appear in the service display.

ESP® is reactivated by pressing the **SPORT** button again or switching on the ignition. For sport mode, refer previously earlier in this chapter.

Interactive driving system (IDS+)*

IDS+ unites the sensors and control units of the Electronic Stability Program (ESP®), Anti-lock Brake System (ABS) and Continuous Damping Control (CDC). This provides both excellent driving dynamics and greater safety.

*CONTINUOUS DAMPING CONTROL (CDC)**

Continuous Damping Control (CDC)*

CDC adapts vehicle damping to the current driving situation and road conditions. The system continually monitors wheel and vehicle movements and immediately modifies the damping of each shock absorber. Chassis calibration is optimally adapted to the driving situation and road conditions. When sport mode is engaged, the damping control is adapted to a sportier driving style (“harder” chassis calibration).

Sport mode with (CDC)*

Sport mode is used to change damping, steering, throttle application and the shift point for automatic transmissions (unless cruise control is on) while driving. Damping and steering become more direct and provide better contact with the road surface. The engine reacts more quickly to accelerator movements.

To activate

Press the **SPORT** button. The LED in the button illuminates.

In vehicles with automatic transmission* The control indicator also illuminates.

Note Sport mode cannot be activated if the winter mode is active.

To deactivate

Press the **SPORT** button again or switch off the ignition. The LED in the button goes out.

Sport mode is deactivated when the Winter mode is activated.

DRIVING PRECAUTIONS

BRAKES

- Power-assisted brakes use vacuum from the engine when it is running. Never let the vehicle run down steep grades without the engine running.
- Never coast with the engine switched off.
- Driving through water may affect brake performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed (while ensuring a clear distance ahead). Do this until brake performance returns to normal.
- Do not obstruct brake pedals with ill-fitting floor mats or any other material under the pedal.
- Position your seat so that you can push the brake pedal properly under all braking conditions.

POWER STEERING

You can still steer the vehicle if the power steering is rendered ineffective. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

LOOSE ARTICLES

Do not leave loose articles or luggage in the passenger compartment. Whenever possible, loads stowed in the luggage compartment should be firmly secured. Refer to *Loading the vehicle* in chapter 9.

WARNING
Gas cylinders can leak, creating a risk of fire or explosion. As a precaution, ensure adequate ventilation when carrying gas cylinders. They must be restrained from rolling around and, where possible, placed in the load area of the vehicle. If gas cylinders are frequently transported use a purpose-built carrying compartment. Transportation of gas cylinders is regulated by legislation in some States.

DRIVING PRECAUTIONS cont.

TYRES

Tyre traction

A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other materials are on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.

Snow chains

- Snow chains are only to be fitted on the front (driving) wheels of front wheel drive vehicles.
- Chains must be fitted on the tyre evenly.
- Use only fine-linked chains, not protruding more than 10 mm on the tyre tread and inside of the tyre (including the chain lock).
- Depending on design, large hub caps may come into contact with parts of the chains. In such cases, remove the hub caps.

WARNING

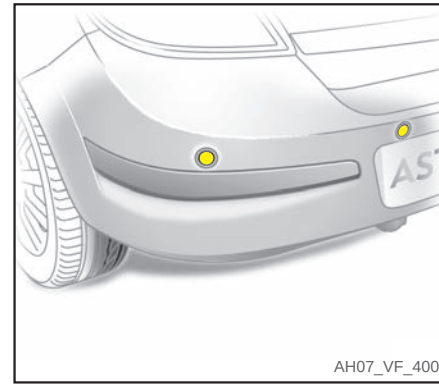
- Snow chains can only be used at speeds up to 50 km/h and, when travelling on roads that are free of snow they should only be used for brief periods, as they are subject to rapid wear on hard roads and may snap.
- Snow chains must not be used on the temporary spare wheel*. If you need to use snow chains after suffering a flat front tyre, fit the temporary spare* on the rear axle and transfer one of the rear wheels to the front axle.
- Snow chains are not permitted on tyres of size, 225/40 R 18*.

*PARK ASSIST**

Parking distance sensor

The parking distance sensor makes reverse parking easier by measuring the distance between the vehicle and an obstacle at the rear, and giving an audible signal in the passenger compartment.

The system records the distance using four sensors in the rear bumper.



WARNING
Under certain circumstances, various reflective surfaces on objects or clothing as well as external noise sources may cause the system to fail to detect obstacles. For this reason, care must be taken when reversing even if the parking distance sensor is operational. This is of particular importance when in the vicinity of pedestrians.

To activate

The parking distance sensor system activates automatically when the ignition is switched on and reverse gear is engaged.

Its operational readiness is indicated by illumination of the indicator light in the button.

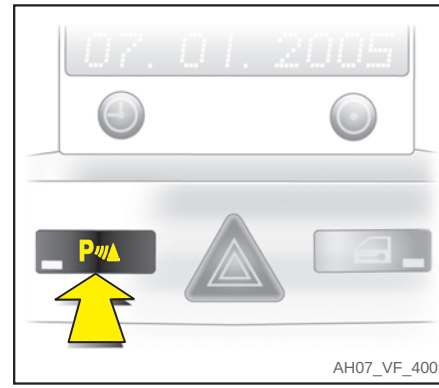
If the vehicle approaches an obstacle when reversing, a series of signals can be heard in the vehicle interior. The interval between the signals becomes shorter as the distance is reduced. If the distance is less than 30 cm, the signal will be continuous.

To deactivate

The system deactivates automatically when reverse gear is disengaged.

To deactivate the system when reverse gear is engaged, press button P. The indicator light in the button extinguishes.

To reactivate, press button P again.



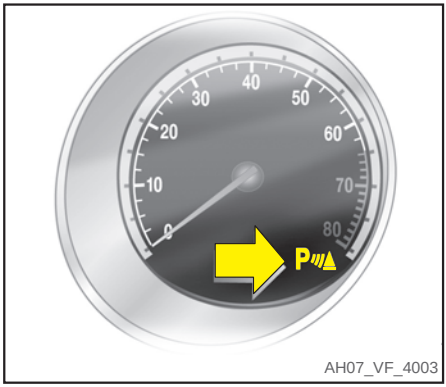
PARK ASSIST cont.*

Control indicator P

If the P illuminates this indicates a fault in the system. The system is not ready for operation. Contact your Holden Dealer. The system's integrated self-diagnostics allows faults to be quickly remedied.

If the P flashes this indicates a fault due to sensors being damaged or obstructed. The sensors must be undamaged and free of dirt and other foreign material.

Note Interference may be due to external sources of ultra sound (e.g. pneumatic drills, rotary machines). Once the source of interference is removed, the system will operate normally.



NOTES

CHAPTER 5

Fuel

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Emission control 5-6

Reducing fuel consumption 5-7

WARNING

The vehicle's engine has not been designed for conversion to LPG. The performance and safety of the vehicle would be seriously jeopardised if converted to LPG.

*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

FUEL

EXHAUST WARNING - CARBON MONOXIDE POISONING

- Exhaust gases can contain carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.
- If your vehicle's exhaust system is faulty, you could inhale the gases.
- To protect against exhaust gases entering the vehicle, the exhaust system and body should be inspected:
  - each time the vehicle is serviced,
  - whenever a change is noticed in the sound of the exhaust system,
  - whenever the exhaust system, underbody or rear of the vehicle is damaged.
- Take the vehicle to your Holden Dealer if you think your vehicle needs inspecting for any of the above reasons.
- DO NOT SIT (OR LEAVE CHILDREN OR PETS) IN A PARKED VEHICLE FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING. DO NOT RUN THE ENGINE IN AN ENCLOSED AREA (SUCH AS THE GARAGE) ANY LONGER THAN IS NEEDED TO MOVE THE VEHICLE.
- Driving with the hatch open is not recommended. If you must travel with the hatch open, close all windows, ensure that the heater controls are set to outside (rather than recirculate) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h.

LPG conversion

Your vehicle was not designed to be converted to LPG. Holden does not provide LPG conversion kits for these vehicles. Your New Vehicle Warranty may be invalidated to the extent that any LPG alterations affect the specifications of your vehicle. Refer to the Service/warranty booklet.

FUEL cont.

Use of petrol containing ethanol

WARNING - Z18XER & Z20LER ENGINES

- When purchasing such fuel, we recommend that your vehicle be operated on fuel containing no more than 10% ethanol. Purchasing your fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 10% ethanol or fuel which contains abnormal fuel properties.
- Under no circumstances should you use fuel containing more than 10% ethanol. Use of such fuels may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle and personal injury.
- It is also important to note that when ethanol blends are used, fuel consumption can be expected to increase due to the lower energy content of ethanol.

WARNING - Z22YH ENGINES

- When purchasing such fuel, we recommend that your vehicle be operated on fuel containing no more than 5% ethanol. Purchasing your fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 5% ethanol or fuel which contains abnormal fuel properties.
- Under no circumstances should you use fuel containing more than 5% ethanol. Use of such fuels may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle and personal injury.
- It is also important to note that when ethanol blends are used, fuel consumption can be expected to increase due to the lower energy content of ethanol.

Use of diesel fuel containing ethanol

WARNING

- When purchasing diesel fuel, we recommend that your vehicle be operated on diesel fuel containing no more than 5% fatty acid methyl ester (“FAME”) also known as “B5”. Purchasing your fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 5% FAME or fuel which contains abnormal fuel properties.
- Under no circumstances should you use diesel fuel containing ethanol. Use of such fuels may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle and personal injury.

FUEL FILLING

WARNING

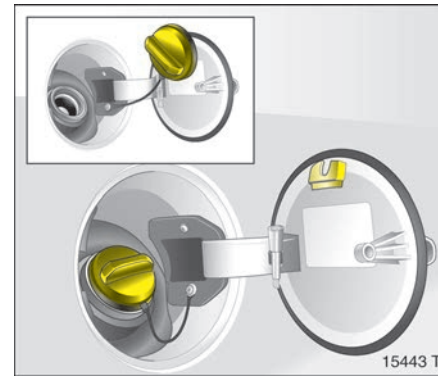
- Fuel is extremely flammable and highly explosive.
- Always turn off the engine and any mobile phones when refuelling.
- Do not smoke or allow open flames or sparks near the vehicle when refuelling.
- If fuel fumes are smelled while driving, the cause should be found and corrected without delay by a Holden Dealer.

Refuelling

The fuel filler is located on the driver's side of the vehicle.

The fuel flap unlocks when the doors are unlocked and locks when the doors are locked.

1. Remove the filler cap by turning the cap anticlockwise.
2. Hang the filler cap on the fuel flap while filling (as illustrated).
3. After refilling, tighten the cap firmly clockwise and close the fuel flap.



Overfilling

Overfilling of the fuel tank can affect the evaporative emission control system and can also result in a smell of fuel inside the vehicle, therefore:

- Always fill fuel tanks at the intermediate or fast fill rate. Do not add any more fuel after the fuel filler first clicks off (or fuel blows back) – as this allows room for the fuel to expand inside the tank.
- You can 'trickle fill' fuel tanks when vehicles are to be driven for more than 50 km straight after the tank is filled. However, this is not recommended on hot days (over 30 °C).
- Wipe off any overflowing fuel immediately from the vehicle and close the fuel opening. Spray or splash with water.

Fuel filler nozzle restrictor for petrol engines

To help the environment, your vehicle has been designed to operate on unleaded fuel. A fuel nozzle restrictor is fitted to ensure that only unleaded fuel is used. The leaded fuel nozzle is wider and therefore cannot open the flap. This allows the thinner, unleaded fuel nozzle to open the flap, so that fuel can be added to the tank.

Fuel filler cap

If replacing the fuel filler cap, be sure to use a genuine Holden fuel filler cap for your model to ensure full functionality. Diesel engine vehicles have special fuel filler caps.

FUEL FILLING cont.

WARNING
The use of any fuel other than the fuel specified, may cause serious damage to your vehicle and may void your New Vehicle Warranty. Only use good quality clean fuel.

Fuel requirements for petrol engines Research Octane Number (RON)

Use clean, unleaded fuel of at least 91 octane rating. High octane (premium unleaded) can be used and will provide slight improvement in engine power and torque.

Fuel requirements for turbo petrol engines

If no unleaded premium fuel is available, 91 RON can be used taking care to avoid high engine load or full load as well as for driving in mountainous terrain with a caravan/ trailer load or high payload.

Fuel requirements for diesel engines

Diesel engines must be operated only on commercially available ultra low sulphur diesel fuel meeting the requirements of the Australian National Fuel Standards. The use of bio-diesel containing up to 5% fatty acid methyl ester (“FAME”) also known as “B5” is also permitted provided that the fuel properties still meet the Australian National Fuel Standards. Do not use marine diesel oils, heating oils or entirely or partially plant-based diesel fuels, such as rape seed oil or bio-diesel containing more than 5% FAME.

WARNING
Use only Ultra Low Sulphur Diesel (ULSD) fuel or bio-diesel containing up to 5% FAME that meet the Australian National Fuel Standards based on EN590. Use of any fuel other than the fuels specified, may cause serious damage to your vehicle and may void your new vehicle warranty.

Note From January 1, 2006, ULSD became the national standard for diesel fuel sold within Australia.

Diesel fuel filter*

The vehicle’s fuel filter will be checked for any water residue when the vehicle is serviced. Refer to the Service/warranty booklet.

Illumination of together with **InSP4** in the service display indicates water in the fuel filter.

Note Have the fuel filter checked at shorter intervals if the vehicle is subjected to extreme operating conditions such as high humidity, extremely high or low outside temperatures and substantially varying day time and night time temperatures by a Holden Dealer.

EMISSION CONTROL

Your vehicle is fitted with emission control systems which are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere.

Hydrocarbons and oxides of nitrogen, when exposed to sunlight under certain conditions, contribute to photochemical smog. In addition, carbon monoxide is toxic when it becomes highly concentrated in the air.

Owner responsibility

Vehicles sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine, engine control system and exhaust system of your vehicle must not be modified in any way. Any change to the manufacturer's design may increase the emissions or otherwise defeat the intent of the regulations.

WARNING
Any person who removes, modifies or hinders any part of the emission control system fitted to a vehicle will be contravening Australian Design Rules. Refer to A.D.R. 83/00 (External Noise for Motor Vehicles) and A.D.R. 79/01 (Emission Control for Light Vehicles). It is also illegal to drive a vehicle modified in this way.

Maintenance requirements

To ensure continuing compliance with the regulations, you must maintain the vehicle emission control system as per the Service/warranty booklet, at the frequency shown in the maintenance schedule within the Service/warranty booklet.

Necessary servicing should be performed by an authorised Holden Dealer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

Diesel particle filter* (automatic transmission)

The diesel particle filter is cleaned automatically. As soon as the road and traffic situation permits it, increase speed to more than 40 km/h for a brief period. The control indicator goes off as soon as cleaning is complete.

Note The engine cooling fan and rear window demister come on during cleaning.

WARNING
Damage to the diesel particle filter or the vehicle may result if the following points are not observed:

Consult your Holden Dealer, as quickly as possible in the event of irregular engine running, a significant loss of engine power or other unusual malfunctions. If necessary, driving may be continued for a short time at a low speed and with a low engine speed.

Irregular engine running and a loss of engine power when the Electronic Stability Program (ESP®)* comes into action are the result of operating conditions and are therefore of no significance. Refer to *Electronic stability program* in chapter 4.

REDUCING FUEL CONSUMPTION

Engine

Maintain the engine in peak mechanical condition by having it serviced regularly in accordance with the maintenance schedule in the Service/warranty booklet. This ensures that items such as the spark plugs and the air cleaner are maintained for minimum fuel usage and peak engine performance.

Tyre pressure

Maintain the recommended tyre pressures. Inadequate tyre pressure costs money in two ways: higher fuel consumption and increased tyre wear. Refer to *Tyres* in chapter 7.

Wheel alignment

Maintain correct front wheel alignment. Incorrect alignment causes drag, which increases fuel consumption.

Warm ups and idling

Avoid long engine warm ups. They are unnecessary and waste fuel. An engine reaches its efficient operating temperature most effectively when driving.

Also avoid long engine idling. If you have to wait for more than a couple of minutes, it is worthwhile to switch off the engine and conserve fuel. Three minutes of idling corresponds to approximately 1 km of driving.

Accelerating, driving and braking

Accelerate gently, avoiding rapid starts. Sudden bursts of speed, full throttle acceleration and hard braking are certain fuel wasters. Drive the vehicle at steady speeds where possible (after run-in). It is desirable to reach top gear as soon as possible, but under no circumstances should you force the engine to labour in top gear.

Riding the brake

Resting your foot on the brake pedal when you do not intend to brake (also called riding the brake) can cause the brakes to overheat. This can wear out the brake pads faster, damage the brake system and waste fuel.

Air conditioning

Turn off the air conditioning when not required to reduce fuel consumption, except for system lubrication purposes. Refer to *Air conditioning* sections in chapter 1A.

Roof racks

Roof racks can increase fuel consumption by 1 litre per 100 km or more due to increased air resistance. Therefore, they should be removed when not in use.

Loading

Unnecessary weight increases fuel consumption especially when accelerating. In city traffic, a load of 100 kg can increase fuel consumption by 0.5 litre per 100 km.

NOTES

CHAPTER 6

Emergencies

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*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation, servicing or the validity of original equipment supplied with your vehicle will be handled by your Holden Dealer's Sales and Service Department.

We realise however that, with the best intentions, misunderstandings sometimes occur.

Therefore, we suggest you discuss any concern with one of the Holden Dealer's management people. If you have not received satisfaction from the Sales Manager or Service Manager – go to the General Manager or to the Dealer Principal.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

The Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The contact number is:

1800 033 349

If your concern relates to parts/accessories and you have made contact with the dealer or distributor without satisfaction, you may contact Holden Service Parts Operations on (03) 9797 7341.

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne 3001

Your letter should clearly outline your concern or query, and include the following:

- Your name and address.
- Telephone numbers, both private and business.
- Servicing dealer's name and address.
- Vehicle model.
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of the Service/warranty booklet in your vehicle's glovebox.
- Date of purchase.
- Current odometer reading.

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of the Service/warranty booklet in your vehicle's glovebox.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

FOR NEW ZEALAND HOLDEN OWNERS

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand. Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glovebox wallet.

New Zealand Assistance can be reached on:

0800 HOLDEN (0800 465 336)

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

If you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne
Australia 3001

FLAT TYRE

If using a jack other than the one supplied with the vehicle, refer to *Trolley jack/hoist locations* in chapter 7.

WARNING
- Use the jack only for lifting the vehicle when changing wheels.
- Do not get under a vehicle supported only by a jack: use vehicle support stands.
- Do not start or run the engine while the vehicle is only supported by the jack.
- All passengers should be out of the vehicle when it is being jacked.
- Use the jack only at the designated lifting points. Use in other locations may result in the vehicle falling off the jack, or damage to the vehicle.
- The vehicle should only be jacked on hard, level surfaces.
- The TwinTop roof must be closed.

1. Park on a level, firm and non-slippery surface, ensuring the wheels are pointing straight ahead and the parking brake is set firmly.
2. Switch on hazard warning flashers.
3. Remove the ignition key (to lock the steering) and place manual transmission in **R** (reverse) or automatic transmissions in **P** (park).
5. Lift up or remove the floor cover.

   Hatch: Hold the floor in place using the recesses at the side.

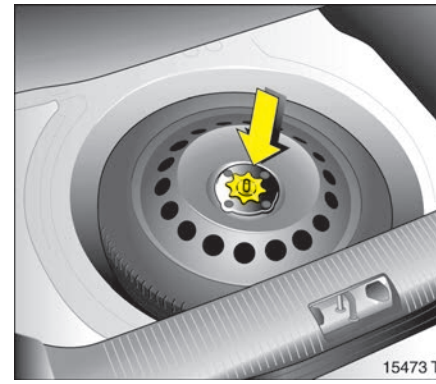
   Wagon: Raise the rear lashing eyes* and lift the floor cover to a vertical position until it is held in place by the headlining.

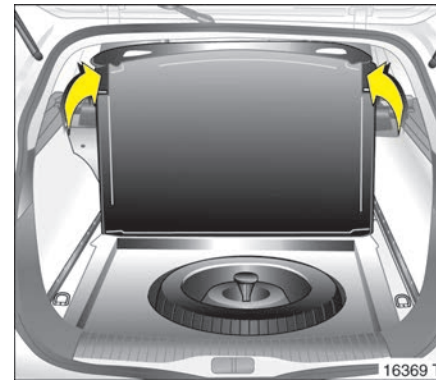
   TwinTop:

   Note If the roof is open: close the roof. Refer to *TwinTop convertible hard top* in chapter 3.

   Remove the floor cover in the luggage compartment.
4. Remove the spare wheel, jack and tools located under the luggage compartment floor.

   Note
   - There is a spacer fitted over the wing nut on wagons.
   - Some models have a foam spacer on top of the spare wheel.

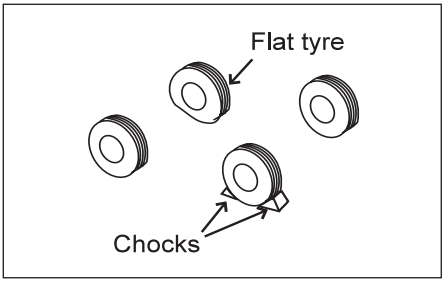




FLAT TYRE cont.

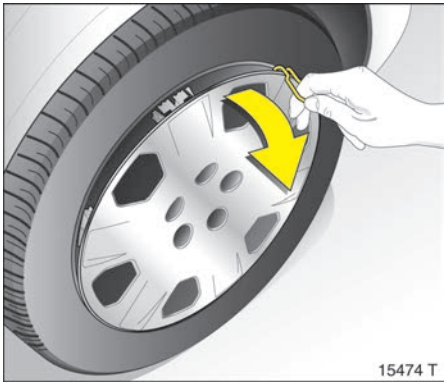
WARNING: TEMPORARY SPARE WHEEL*
Your vehicle may be fitted with a temporary spare wheel (this is indicated by an 80 km label on the spare wheel). The temporary spare wheel is for emergency spare use only; drive carefully and do not exceed 80 km/h when the wheel is fitted on the vehicle. Your vehicle's handling capabilities will be reduced when the temporary spare wheel is fitted. Only one temporary spare can be used on the vehicle at the one time. The flat tyre should be repaired and refitted to the vehicle as soon as possible.

7. Chock the wheel diagonally opposite the flat tyre by placing wedge blocks, or any available blocks of wood or rocks behind and in front of the tyre.



Steel wheels:

For vehicles with wheel covers, remove the cover by hand, using the tool in the vehicle tool kit.



Alloy wheels:

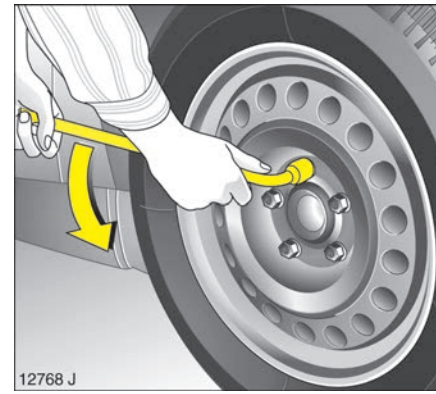
Use the flat-blade end of the screwdriver to remove the wheel bolt plastic caps*.

For vehicles with centre caps, use a screwdriver (provided in the tool kit) to remove the cap using the following method.

- Position the screwdriver in the recess at the side of the hub cap and lever the cap partly off.
- Place the screw driver in the opposite bolt hole and lever the cap fully off the wheel.

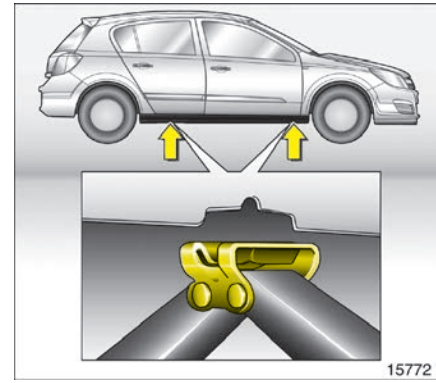
FLAT TYRE cont.

8. Loosen (but do not remove) the wheel bolts by turning the wheel wrench anticlockwise.



9. The location of each jacking point is indicated by a mark on the bottom edge of the vehicle.

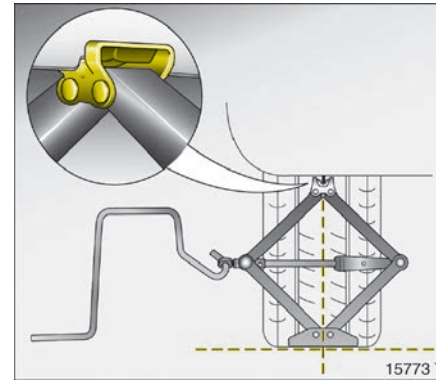
WARNING
Failure to position the jack as described above could result in serious personal injury or vehicle damage caused by the vehicle slipping off the jack.



10. Position the jack in the recess that is nearest the flat tyre.

    Ensure that the jack head fits into the jack points on the vehicle's underbody and that the jack base is on the ground directly below the jacking point.

WARNING
On the TwinTop, the roof must be closed before the vehicle is raised. Refer to *TwinTop convertible hardtop* in chapter 3.



FLAT TYRE cont.

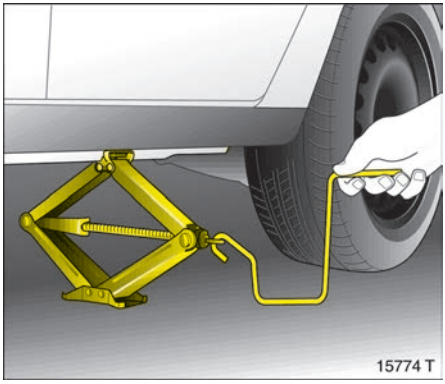
11. Raise the vehicle by turning the crank handle until the tyre is clear of the ground.
12. Remove the wheel bolts and place together in a clean, dry spot to avoid getting dirt on the threads.
13. Remove the wheel from the vehicle and change it over with the spare.
14. Replace the wheel bolts and tighten by hand.
15. With the wheel wrench, lightly tighten in a crisscross sequence.
16. Lower the vehicle completely and remove the jack.
17. Fully tighten the wheel bolts with the wheel wrench in a crisscross sequence, (illustrated).
18. Replace the wheel trim:

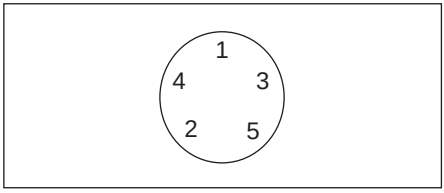
    Steel wheels:

    Wheel covers have a valve symbol on the rear of the cover, which should point towards the valve itself. Line the hole for the valve with the valve and press on the wheel trim.

    Alloy wheels:

    Replace the individual wheel stud caps and press on the centre cover.





19. Install the jacking point cover* to the body by hand.
20. Stow away the wheel, tools, and jack.

    Note

    - If the standard size wheel will not fit in the spare wheel well after changing wheels, place the floor cover on the overlaying wheel. This must be observed when loading the vehicle.
    - For the TwinTop make sure the wheel and floor cover are not any higher than the luggage cover.

21. Have the flat tyre repaired as soon as possible.

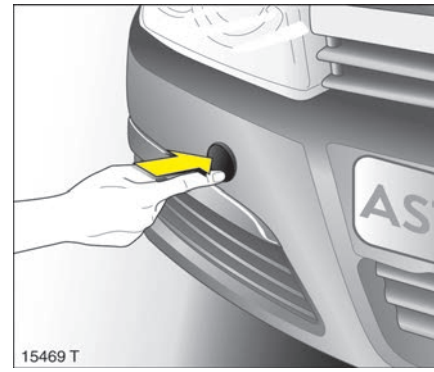
WARNING

- As soon as possible after changing a wheel, you should have the wheel bolts tightened with a torque wrench to 110 Newton metre and have the new wheel balanced on the vehicle.
- Wheel bolts should be tightened evenly to the correct torque in a crisscross pattern while the vehicle in on the ground. Wheel bolts which have not been tightened properly could eventually allow the wheel to come off while the vehicle is moving.

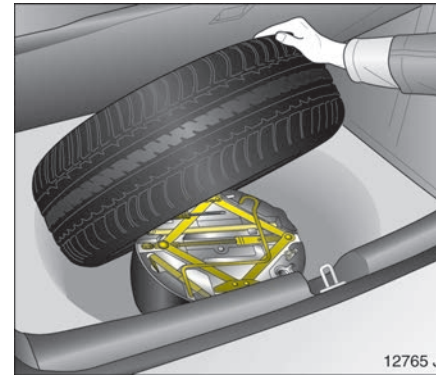
TOWING A DISABLED VEHICLE

Use proper lifting or towing equipment to prevent damage during any towing operation of the vehicle. Ensure you follow State and local laws. In an emergency, you may tow your vehicle on all four wheels in the following manner:

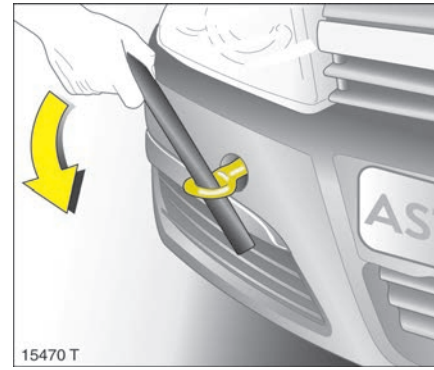
1. The towing eye hole is located behind a cover, at the front of the vehicle on the driver's side. To access the towing eye hole, press the cover and pull it downwards.



Note The towing eye itself is located in the tool compartment underneath the spare wheel in the luggage compartment.



2. Screw in the towing eye anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye.
3. Attach a tow rope to the eye. Do not attach to the bumpers, brackets or any other part of the vehicle.
4. Place transmission in **N** (neutral) and release the park brake.
5. Switch on the ignition. This frees the steering lock and allows the correct operation of windscreen wipers, horn and turn signals.
6. To prevent damage to the vehicle, drive slowly and avoid jerky movements during towing operations.



TOWING A DISABLED VEHICLE cont.

7. Remember, power assist for brakes and power steering are not available when the engine is off. Consequently, more effort will be required to brake and steer.
8. Close the windows and stop entry of air by moving heating and ventilation controls to the recirculate position. This prevents the entry of exhaust fumes from the towing vehicle into the passenger compartment of your vehicle.
9. If your vehicle is fitted with automatic transmission, only tow facing forwards and do not tow for more than 100 km or at over 80 km/h.
10. If the transmission is defective, or if you must exceed the above speed or distance, the front of the vehicle must be raised.
11. Only the driver should be in a towed vehicle.

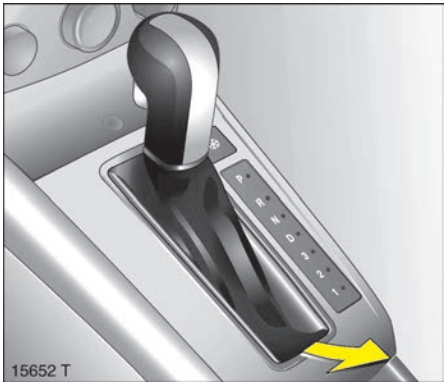
Automatic transmission petrol (4 speed)

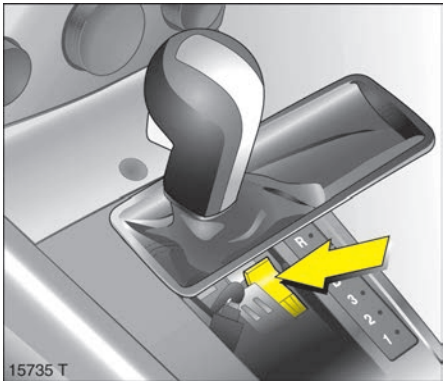
For safety, the transmission has an electric park lock. The key must be in the ignition (in the on position) before the shift lever can be moved away from the **P** (park) position.

However, the shift lever cannot be moved as required if the vehicle's battery is flat.

To move the shift lever when towing in this circumstance:

1. Apply the park brake.
2. Disengage the cover from the console below the park brake lever.
3. Disengage the shift lever trim from the console and fold upwards.
4. Push the catch forward and move the shift lever handle out of the **P** (park) position, as illustrated.
5. Install the shift lever trim onto the centre console.
6. Install the cover on the console.





TOWING A DISABLED VEHICLE cont.

Automatic transmission diesel (6 speed)

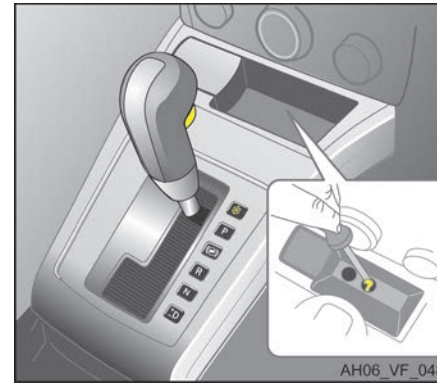
For safety, the transmission has an electric park lock. The key must be in the ignition (in the on position) before the shift lever can be moved away from the **P** (park) position.

However, the shift lever cannot be moved as required if the vehicle's battery is flat.

To move the shift lever when towing in this circumstance:

1. Apply the park brake.
2. Remove the rubber mat covering the bottom of the stowage compartment (next to the accessory power socket).
3. Using a screwdriver, push the yellow catch down through the R/H side hole and move the shift lever out of **P** (park) position.
5. Refit the rubber mat from the bottom of the stowage compartment.

Note Re-selecting **P** (park) will lock the shift lever again.



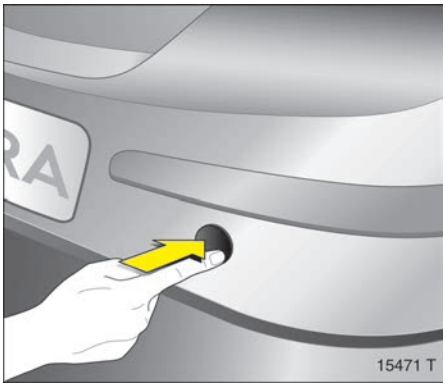
TOWING A DISABLED VEHICLE cont.

Towing another vehicle

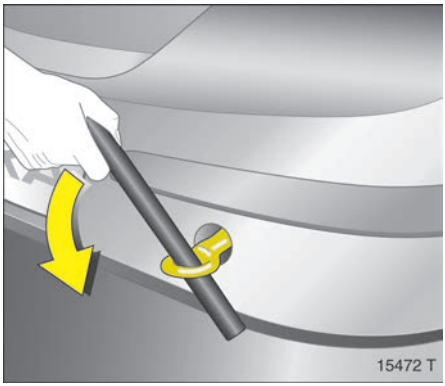
The towing eye hole is located behind a round cover at the rear of the vehicle.

1. To access the towing eye hole, press the cover and pull it downwards.

   Note The towing eye itself is located in the tool compartment underneath the spare wheel in the luggage compartment.



2. Screw in the towing eye anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye.
3. Attach a tow rope to the eye. Do not attach to the bumpers, brackets or any other part of the vehicle.
4. Drive off slowly and avoid jerky movements.



ENGINE OVERHEATING

WARNING
Take immediate action if the engine overheats. This can be indicated by:

- Illumination of the coolant temperature indicator.
- Steam escaping from under the bonnet.
- A loss of power.
- Loud knocking or pinging noise.

Continued driving EVEN FOR A SHORT TIME can cause a fire or vehicle damage.

If your engine overheats, pull out of traffic as soon as possible and stop the vehicle. Leave the engine idling and the park brake applied while you get out and check that the cooling fan is working.

WARNING
Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Scalding fluid and steam can be blown out under pressure which could cause serious burns. Wait until no steam or coolant can be seen or heard before opening the bonnet.

If the fan is working and the engine cooling indicator is still illuminated within a few minutes, stop the engine and remove the ignition key.

Look for leaks at the radiator hoses and connections, heater hoses and connections, radiator and water pump.

Take care when checking all these areas as they can still be hot.

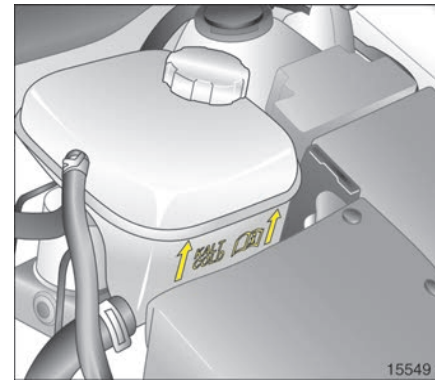
Note If you find a major leak or other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected.

If you do not find anything wrong, check the engine coolant level in the surge tank.

The coolant level in the surge tank should be slightly above the **KALT/COLD** mark when the system is cold.

The level rises with the engine operating temperature and drops again when the engine cools down.

If the level falls below the **KALT/COLD** mark, top up the coolant to a little over the mark.



WARNING
Do not remove the cooling system cap if the engine and radiator are still hot.

ENGINE OVERHEATING cont.

If the engine coolant level is low, remove the surge tank cap as follows:

1. Cover the surge tank cap with a thick cloth, slowly turn the cap anticlockwise and remove.
2. Top up the surge tank with clean water to a little over the **KALT/COLD** mark when the engine is idling.
3. Replace the cap and leave the engine idling for a few minutes.

If the engine cooling indicator no longer indicates overheating after taking one or more of the above actions, resume driving at a reduced speed.

When the engine cooling indicator does not indicate further overheating after 10 minutes of driving at reduced speed, return to normal driving speed.

If overheating recurs, have the vehicle attended to by a Holden Dealer as soon as possible.

Note With this type of sealed, pressurised cooling system there should be very little loss of coolant. If the surge tank is low, there may be a leak. Consult your Holden Dealer as soon as possible to fix the leak.

Engines can temporarily operate at high temperatures during more demanding operating conditions, especially on very hot days. These conditions include:

- Climbing a long or steep hill.
- Stopping immediately after high speed driving.
- Idling for long periods in traffic.
- Towing a heavily laden trailer or caravan.

Avoid operating your vehicle for prolonged periods in any of the above circumstances if the temperature gauge indicates a high engine coolant temperature.

Refer to *Under bonnet checks* in chapter 7.

FLAT BATTERY

WARNING
DO NOT attempt to push start or tow start this vehicle, as it is fitted with a catalytic converter and if un-combusted fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire.

Battery

The battery of your vehicle has a negative earth and a 12 volt rating. The battery in the assisting vehicle must be the same voltage and also have a negative earth. The battery capacity of the charging battery must not be substantially lower than that of the discharging battery.

If your vehicle will not start due to a flat battery, try starting it by using power from a battery in another vehicle. This procedure is called 'jump starting'.

Read the following procedure in full before attempting to jump start your vehicle.

Note If, after reading the following procedure, you are still unsure about jump starting, we strongly recommend for your safety and that of your vehicle that you leave the starting to a competent mechanic.

WARNING
Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery:

- Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is flammable and explosive.
- Do not smoke near a battery.
- Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.
- Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.
- Be sure any batteries that have filler caps are properly filled with fluid.
- Remove rings, metal watch bands and other metal jewellery before working around the battery.
- Carefully follow each step in the jump starting procedures.
- Never use a quick charger to start your engine.
- Do not lean over the battery during jump starting.

FLAT BATTERY cont.

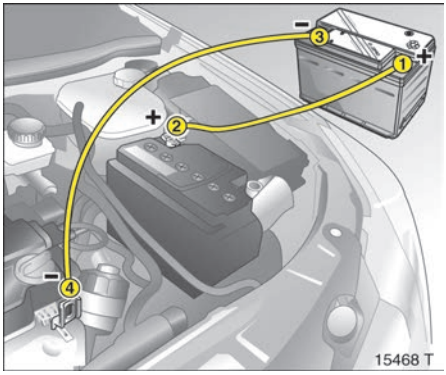
JUMP STARTING

Preparing the vehicle

1. Check the specifications in the assisting vehicle's owner manual to see if it complies with your battery specifications. Serious injury or damage may result if the wrong type of battery is used.
2. Position the two vehicles so that they are not touching and apply the park brakes.
3. Place automatic transmissions in park and manual transmissions in neutral.
4. Turn off the ignition, all lights and accessories in both vehicles, except the hazard warning flasher or any lights needed for the work area.

Connect the leads in the order shown

1. Attach one end of the first jumper cable to the positive terminal of the charged battery (identified by **+** or **P** on the battery case or post or clamp).
2. Connect the end of the same cable to the positive terminal of the flat battery.
3. Attach one end of the second jumper cable to the negative terminal of the charged battery (identified by **–** or **N** on the battery case or post).
4. Connect the other end to a solid stationary, metallic point on the vehicle's engine that has the flat battery.



Note

- Do not connect directly to the negative post of the battery. The connection should be as far away from the flat battery as possible.
- When making any connection, take care that the clamps from one cable do not inadvertently touch the clamps on the other cable.
- Ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.
- Start the engine in the vehicle with the charged battery and run the engine at a moderate speed. Then start the engine in the vehicle with the flat battery. Attempts to start the engine with the flat battery should be made at intervals of one minute and should not last longer than 15 seconds.
- After starting, allow both engines to idle for approximately three minutes with the leads still connected.
- Leave the engine running as you remove the jumper cables by reversing the above sequence exactly.
- When removing each clamp, ensure it does not touch any other metal while the other end remains attached.
- Diesel engines require large capacity jumper leads (diameter of at least 25 m^2).

*DIESEL FUEL SYSTEM BLEEDING**

WARNING
Never let the tank run dry! If control indicator illuminates, refuel as soon as possible. Refuel immediately if it flashes.

It is possible to restart the engine if the tank has been run dry. A delayed start is to be expected. Switch on the ignition three times for approximately 15 seconds. Then attempt to start the engine for approximately 40 seconds. If the engine does not start, wait at least 5 minutes and try again. If the engine does not start, consult your nearest Holden Dealer.

Diesel fuel filter*

The vehicle's fuel filter will be checked for any water residue when the vehicle is serviced as per the maintenance schedule. Refer to the Service/warranty booklet.

Illumination of together with **InSP4** in the service display indicates water in the fuel filter*.

Note Have the fuel filter checked at shorter intervals if the vehicle is subjected to extreme operating conditions such as high humidity, extremely high or low outside temperatures and substantially varying day time and night time temperatures by a Holden Dealer.

BULB REPLACEMENT

When replacing a bulb, turn off the related switch to ensure that it is not illuminated.

Do not touch new bulbs with bare hands. Greasy fingers cause stains, which evaporate and can result in a dull light. Grease spots on halogen bulbs will, within a short time, lead to bulb failure. Clean stained bulbs with tissue paper, or a clean, non-fuzzy cloth, using alcohol or white spirits.

When replacing bulbs do not exceed the wattage rating on the defective bulb base.

Detailed procedures for headlight aiming are provided in chapter 1A, *Lights*. However, because headlight aiming is a safety item, it is recommended that you have it carried out by your Holden Dealer.

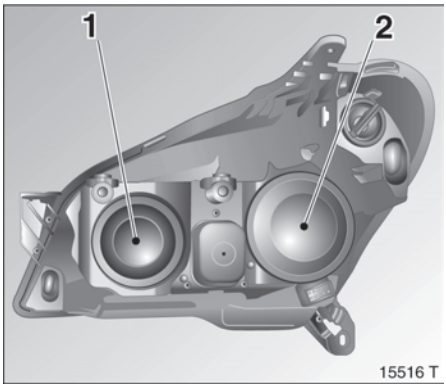
On vehicles fitted with headlight levelling adjustment, the headlight aiming must be carried out with the headlight switch in position **0**.

Bulb replacement for the following lights should be carried out by your Holden Dealer:

- High mounted stop light.
- Your Holden Dealer must replace certain types of interior light bulbs. Refer to *Interior lights* in chapter 3.
- Front fog lights*.
- Instrument lighting.

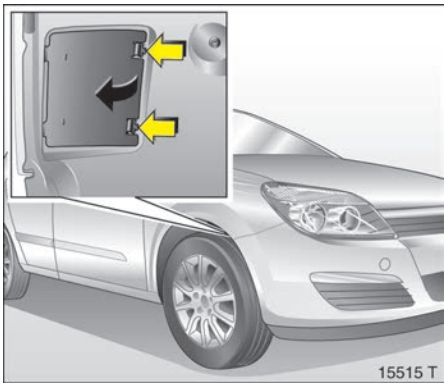
Headlights

Headlights have separate systems for high beam 1 (inner bulbs) and low beam 2 (outer bulbs).



The bulbs of the front outer lights are replaced through openings in the front wheel arch.

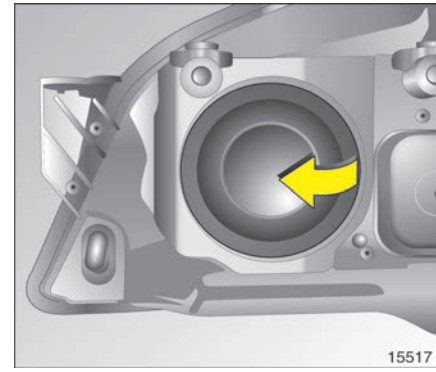
1. Turn relevant wheels to gain access.
2. Release the catch and remove the cover.



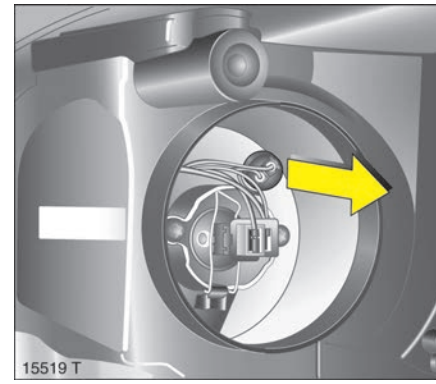
BULB REPLACEMENT cont.

Parking lights

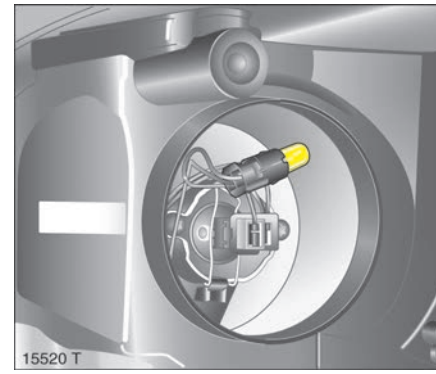
1. Open the bonnet.
2. When replacing bulbs on the right side, detach the air hose at the air filter.
3. When replacing bulbs on the left side, disconnect the plugs at the fuse box.
4. Remove the main headlight protective cover (illustrated).



5. Remove parking light bulb holder from reflector.



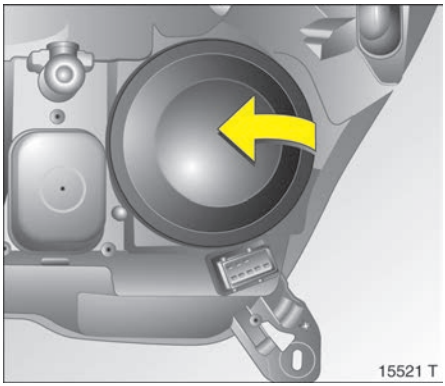
6. Remove the bulb from the holder.
7. Insert a new bulb into the bulb holder without touching the glass.
8. Insert the holder into the reflector and lock it by turning clockwise.
9. Place the protective cover in position and close.
10. Check the light operation.



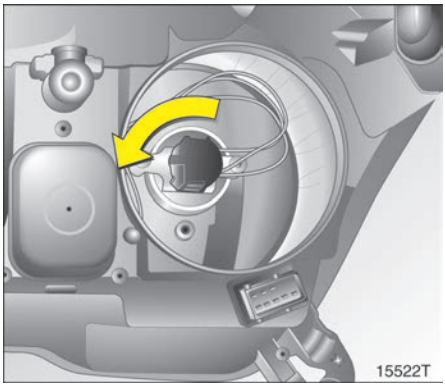
BULB REPLACEMENT cont.

Headlight system low beam

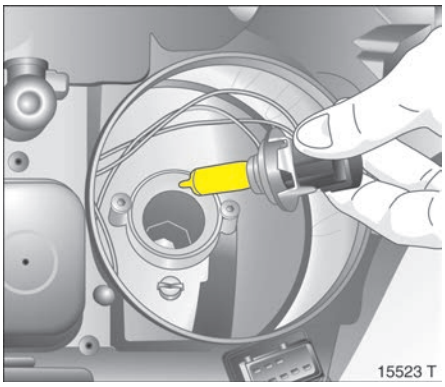
1. Turn the relevant wheel to gain access and release the catch.
2. Remove the protective cover.



3. Rotate the left bulb carrier anti-clockwise and disengage.



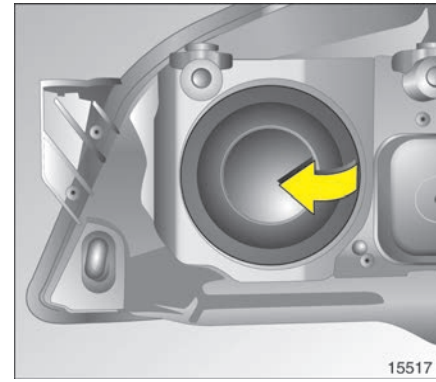
4. Remove the bulb holder from the reflector.
5. Remove the bulb from the bulb holder.
6. Insert a new bulb into the bulb holder without touching the glass.
7. Insert the new bulb and bulb holder so that the two lugs on the bulb holder engage in the recesses in the reflector.
8. Rotate the bulb holder clockwise as far as it will go.
9. Replace the protective cover and close.
10. Check the light operation.



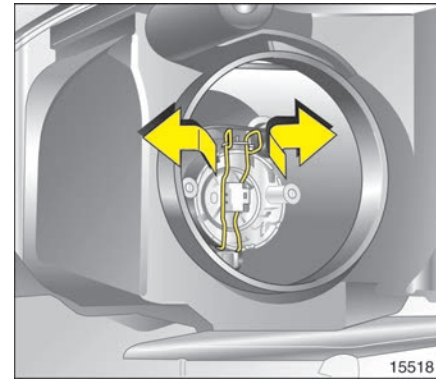
BULB REPLACEMENT cont.

Headlight system high beam

1. Open the bonnet.
2. When replacing bulbs on the right side, detach the air hose at the air filter.
3. When replacing bulbs on the left side, disconnect the plugs at the fuse box.
4. Remove the main headlight protective cover.
5. Detach the plug connector from the bulb.



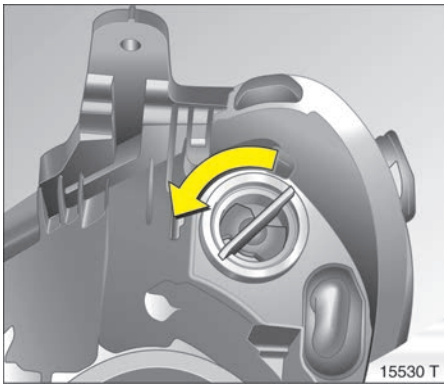
6. Detach the connector from the bulb holder by pressing the retaining clip forward and then swinging it downward.
7. Insert a new bulb into the bulb holder without touching the glass.
8. Insert the new bulb and bulb holder so that the two lugs on the bulb holder engage in the recesses in the reflector.
9. Engage spring wire clip and plug connector onto the bulb.
10. Replace the protective cover in position and close.



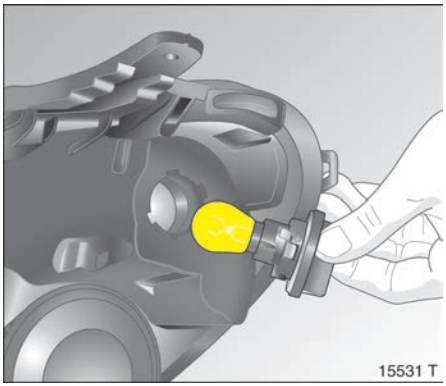
BULB REPLACEMENT cont.

Headlight system
front turn signal lights

1. Open the bonnet.
2. Replace the bulb through the opening in the front wheel arch. Turn the relevant wheel to gain access, release the catch and remove the cover.
3. Rotate the bulb holder anticlockwise and disengage it.



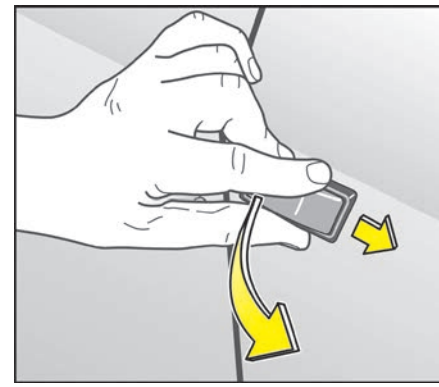
4. Press the bulb into the holder slightly, turn it anticlockwise and remove it.
5. Insert a new bulb and engage the holder into the reflector by turning it clockwise.
6. Check the light operation.



BULB REPLACEMENT cont.

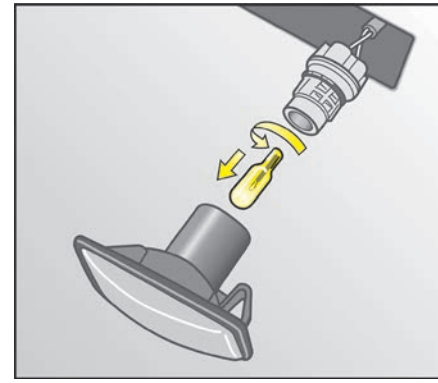
Side turn indicator lights

1. Grasp the lens at the rear, push forwards.
2. Pull the lens away from the body of the vehicle.



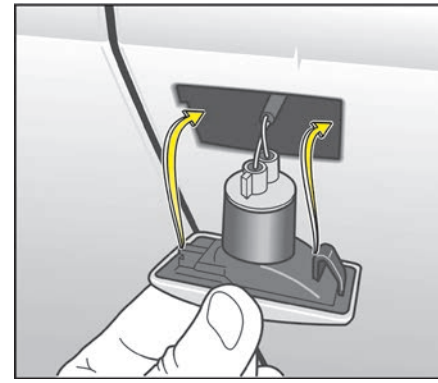
3. Separate the bulb holder from the lens assembly by rotating the bulb holder anticlockwise.

   The bulb pulls straight out of the bulb holder.



4. Insert the new bulb into the bulb holder.
5. Install the bulb holder into the lens housing.

   Note The bulb holder only fits into the lens housing one way. Keep turning the bulb holder until it fits into place and can be tightened.
6. When inserting the light, first locate the rear of the housing into the body before pushing the front inwards to engage the clip.
7. Check the light operation.



BULB REPLACEMENT cont.

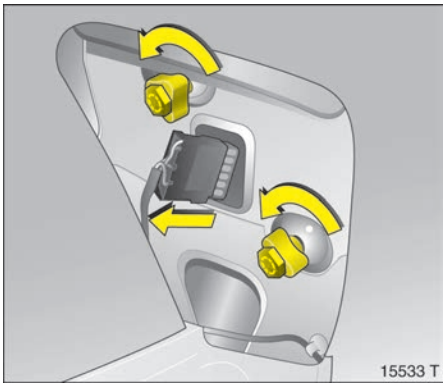
Tail, brake, rear turn signal, reverse lights, rear fog lights (hatch)

1. Open tail light cover.

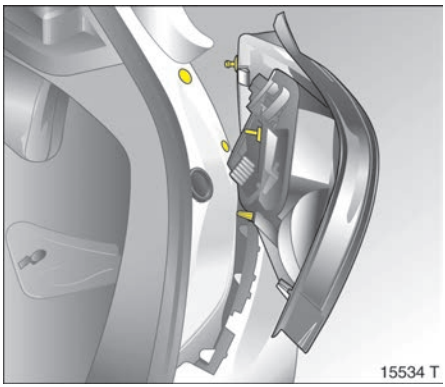
Note

- When replacing bulbs on the right side, use a coin to open the lock and fold the cover down.
- When replacing bulbs on the left side, use a coin to turn both locks and fold the cover down.

2. Detach the plug connector from the bulb holder.
3. Grip the lens from the outside and unscrew the two nuts.

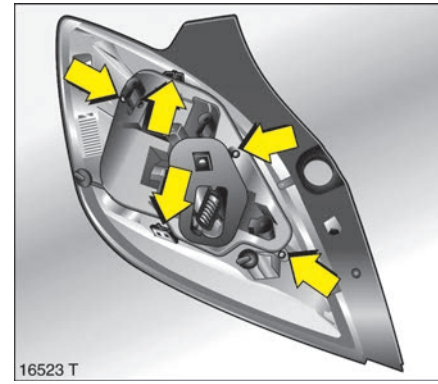


4. Detach the lens from the vehicle body, pulling it towards the rear.



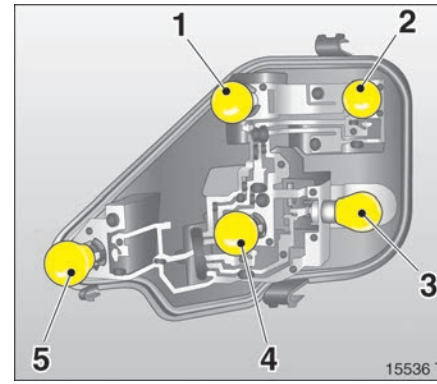
BULB REPLACEMENT cont.

5. Using a screwdriver, unscrew the three retaining screws from the bulb holder. Press the retaining lugs on the outside edge of the bulb holder and remove.



Bulbs in bulb holder:

1. Reversing lamp.
2. Turn signal.
3. Tail lamp/brake lamp.
4. Tail lamp.
5. Fog tail lamp.

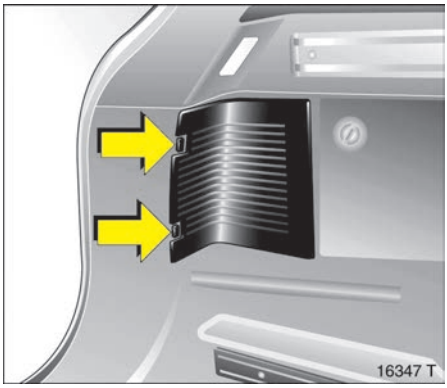


6. Remove the faulty bulb from the bulb holder.
7. Insert the new bulb into the bulb holder.
8. Install the bulb holder onto the lens.
9. Attach the plug connector to the bulb holder.
10. Insert the lens into the vehicle body and tighten fastening nuts by hand.
11. Place the tail light cover into position and click into the closed position.
12. Check the light operation.

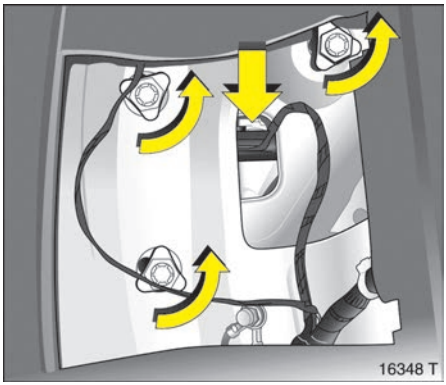
BULB REPLACEMENT cont.

Tail, brake, rear turn signal, reverse lights, rear fog lights (wagon)

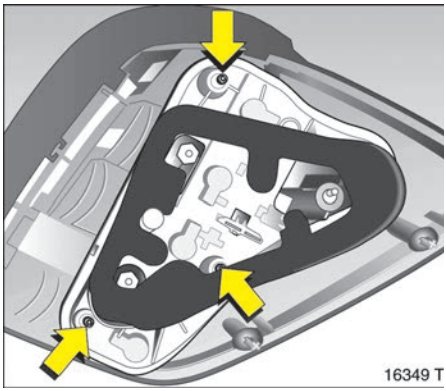
1. Press the retaining lugs to remove the tail light cover.



2. Detach the plug connector from the bulb holder.
3. Grip the lens from the outside, unscrew the three fastening nuts and remove the lens rearwards.



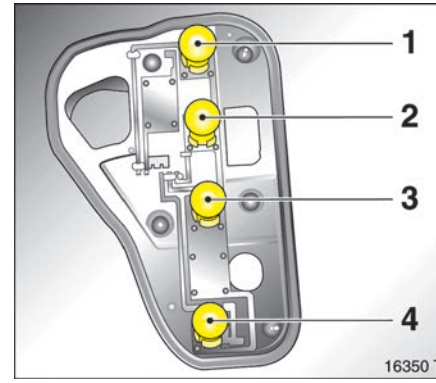
4. Using a screwdriver, unscrew the three retaining screws and remove the bulb holder from the lens.



BULB REPLACEMENT cont.

Bulbs in bulb holder:

1. Tail lamp/brake lamp.
2. Turn signal.
3. Reversing lamp.
4. Fog tail lamp.



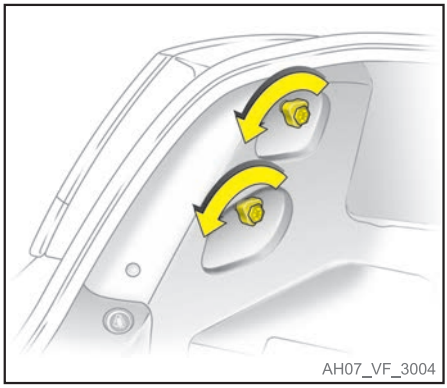
5. Remove the faulty bulb from the bulb holder.
6. Insert the new bulb into the bulb holder.
7. Install the bulb holder onto the lens.
8. Attach the plug connector to the bulb holder.
9. Insert the lens into the vehicle body and tighten fastening nuts by hand.
10. Place the tail light cover into position and click into the closed position.
11. Check the light operation.

BULB REPLACEMENT cont.

Tail, brake, rear turn signal, reverse lights, rear fog lights (TwinTop)

1. Unscrew the retaining nuts.

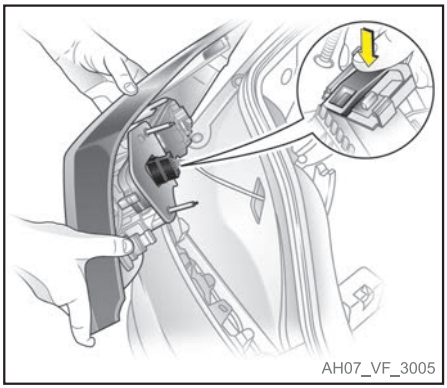
   Note The roof needs to be closed to access retaining nuts.



2. Remove the lens from the outside by lifting the forward corner, then pulling backwards.

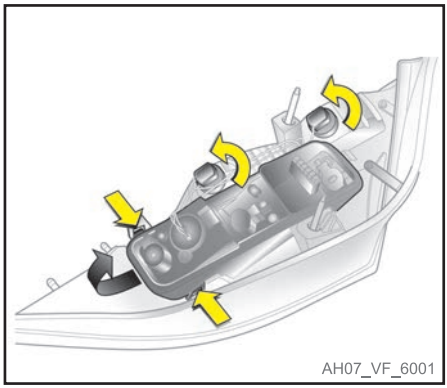
   Disengage the plug by pressing the clip down and removing from the bulb holder.

3. Detach the seal from bulb holder carefully, to prevent damage.



4. Disengage the sockets by turning, then remove.

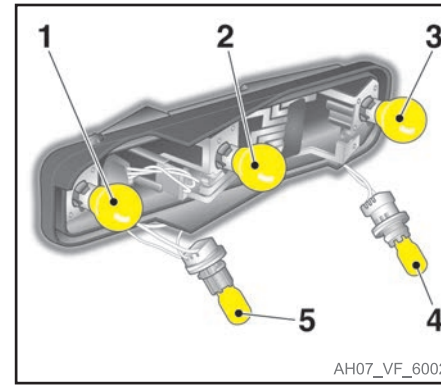
   Press locking tabs on the long sides of the bulb holder outwards; lift the bulb holder at the front end (arrow) and remove.



BULB REPLACEMENT cont.

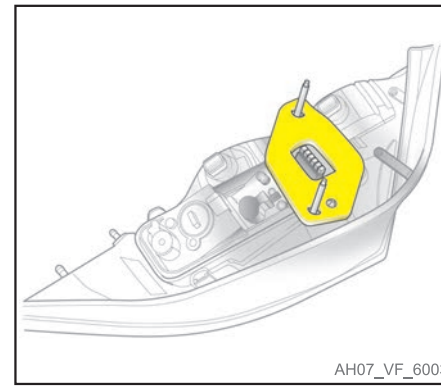
Bulbs in bulb holder:

1. Tail light/brake lamp.
2. Tail lamp.
3. Fog tail lamp.
4. Reversing lamp.
5. Turn signal.



5. Remove the bulb from the socket.
6. Insert the new bulb, without touching the glass.
7. Insert the bulb holder in the bulb housing by first inserting the lug in the front of the plug. Fold together the bulb holder, ensuring that it engages properly.

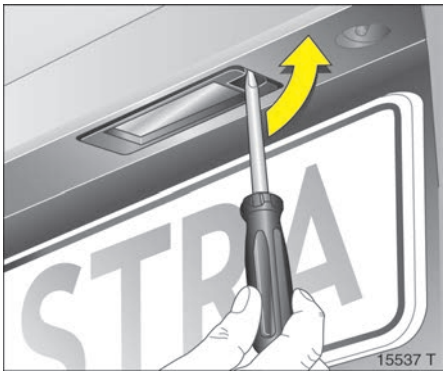
   Insert the sockets and engage by turning.
8. Fit the seal on the bulb holder as illustrated. Ensure that the seal is flat in the area of the screws.
9. Engage the plug. Insert the light housing in the body, ensuring proper positioning of the ball pins in the recesses. Tighten the retaining nuts.
10. Check the light operation.



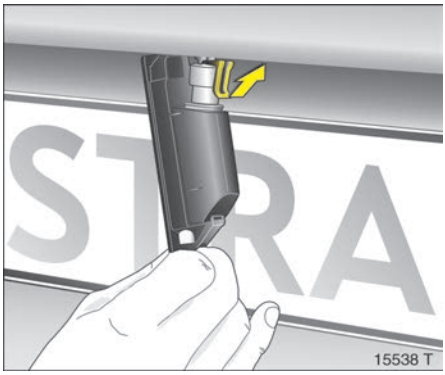
BULB REPLACEMENT cont.

Number plate light

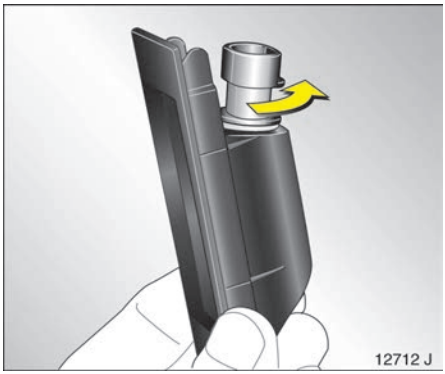
1. Insert a screwdriver into the side of the light (illustrated).
2. Press to the side and disengage the spring.



3. Remove the bulb housing by pulling it downward but take care not to pull on the cable.
4. Lift the flap (illustrated) and disconnect the plug from the bulb socket.



5. Rotate the bulb socket anticlockwise and disengage.
6. Remove the bulb from the socket.
7. Insert a new bulb, without touching the glass.
8. Insert the socket into the bulb housing and rotate clockwise to engage.
9. Connect the plug to the bulb socket.
10. Insert and engage the bulb housing.



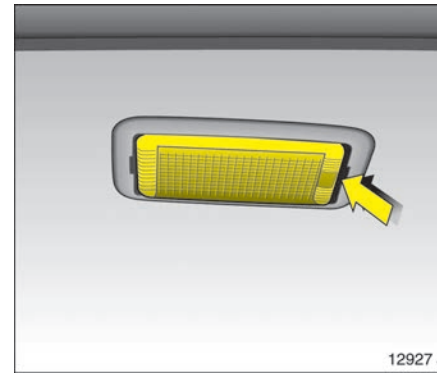
BULB REPLACEMENT cont.

Interior light, glovebox light, rear reading light*, luggage compartment light

Before removing the bulb, close the doors or ensure that the contact switch is kept pressed so that the light is not live.

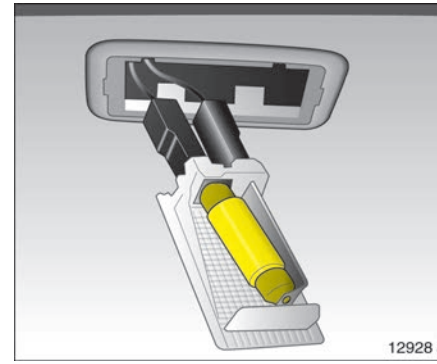
1. Gently prise the light out of the recess using a screwdriver.

   To access the rear reading light, lever the lens out of the housing.



2. Press the bulb slightly towards the spring clip and remove it.

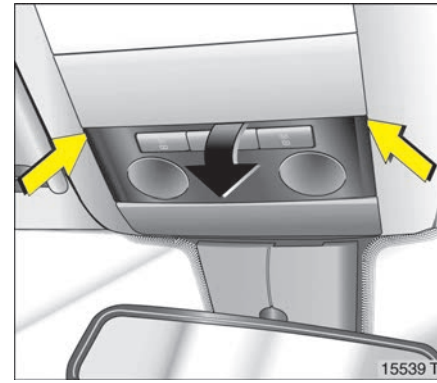
   For the rear reading light, remove the faulty bulb.
3. Insert a new bulb.
4. Install the assembly gently into the recess.
5. Check the light operation.



Front dome lamp with reading spots*

Before removing the bulb, close the doors or ensure that the contact switch is kept pressed so that the light is not live.

1. Press the lens downwards slightly where indicated and lower to remove.
2. Remove the bulb from the socket.
3. Without touching the glass, insert a new bulb.
4. Locate the lens and engage in position.
5. Check the light operation.



FUSES

The vehicle has two fuse boxes:

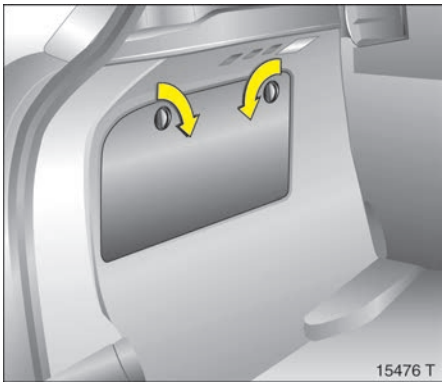
- One behind a cover on the left side of the luggage compartment
- One in the front left of the engine compartment.

Fuse box in luggage compartment (hatch and wagon)

This fuse box is located behind a cover on the left side of the luggage compartment.

Use a coin to turn the locks (illustrated) and fold the cover downward.

Do not store any objects behind the cover.

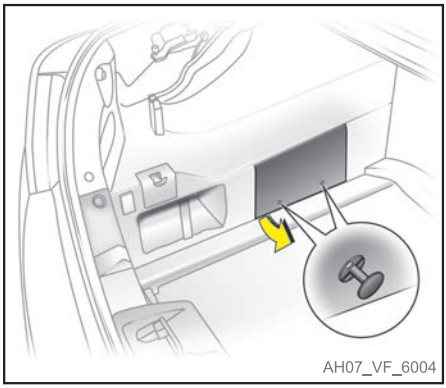


Fuse box in luggage compartment (TwinTop)

This fuse box is located behind a cover on the left side of the luggage compartment.

To open, pull the two knobs, remove the clips and fold the cover upwards.

Do not store any objects behind the cover.



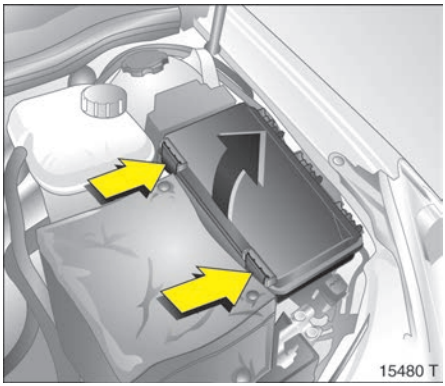
Fuse box in engine compartment

This fuse box is located at the front left of the engine compartment.

Turn off the engine before opening the engine compartment fuse box to avoid injury.

To open the cover, release the catch by inserting a screwdriver into the opening as far as it will go and swivelling it to the side.

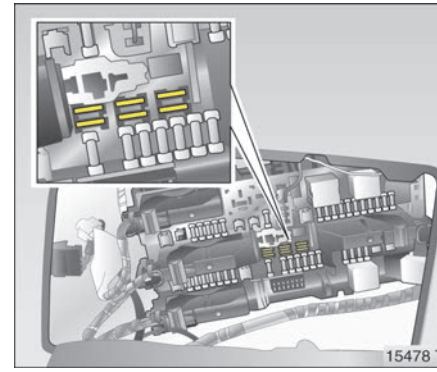
Open the cover upwards and remove.



FUSES cont.

Replace fuse

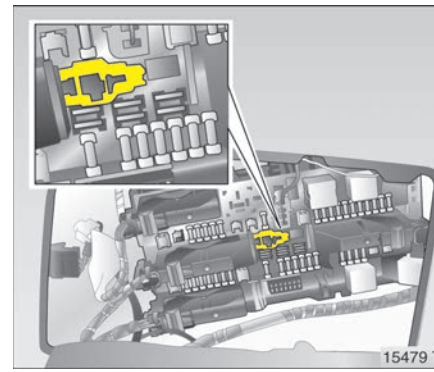
Carry a complete set of spare fuses at all times. The fuse box has extra spaces for storing spare fuses.



To help replace fuses, a special fuse gripping tool is provided on the right-hand side of the fuse box.

Before replacing a fuse, turn off the respective switch and remove the ignition key.

Slot the fuse gripping tool onto the fuse and withdraw the fuse.



FUSES cont.

A defective fuse is recognised by its melted wire. Only install a new fuse after the cause of the trouble has been located and eliminated.

Only fuses of the specified rating should be installed. The rating is present on all fuses.

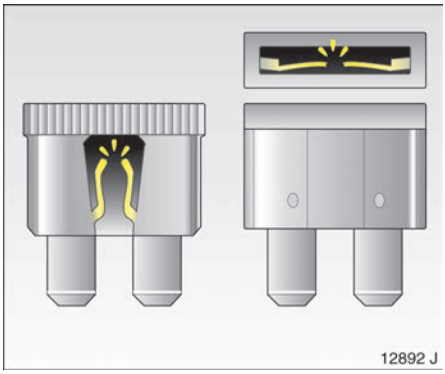
Some circuits may be protected by several fuses.

For fuse ratings, refer below.

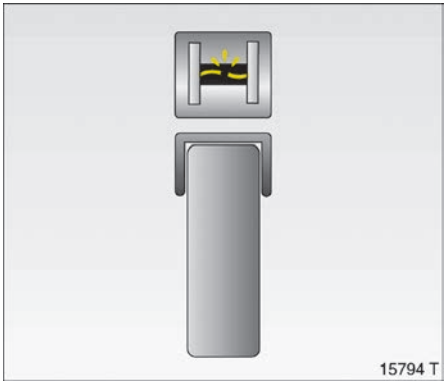
WARNING
When replacing a fuse, be sure to use a fuse of the specified amperage. Never install a wire or similar device to replace a fuse, as it could damage electrical components and may cause a fire hazard to your vehicle.

Fuse Ratings

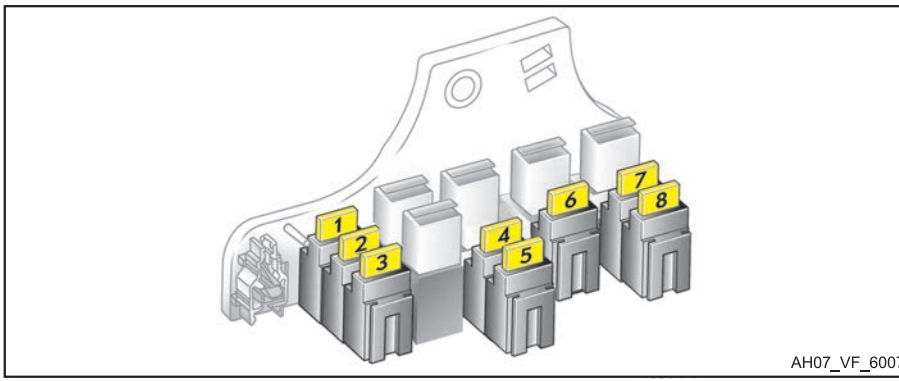
COLOUR	RATING
Light brown	5 A
Brown	7.5 A
Red	10 A
Light blue	15 A
Yellow	20 A
White	25 A
Light green	30 A
Orange	40 A
Dark Blue	60A



COLOUR	RATING
Blue	10 A
White	25 A
Pink	30 A
Green	40 A



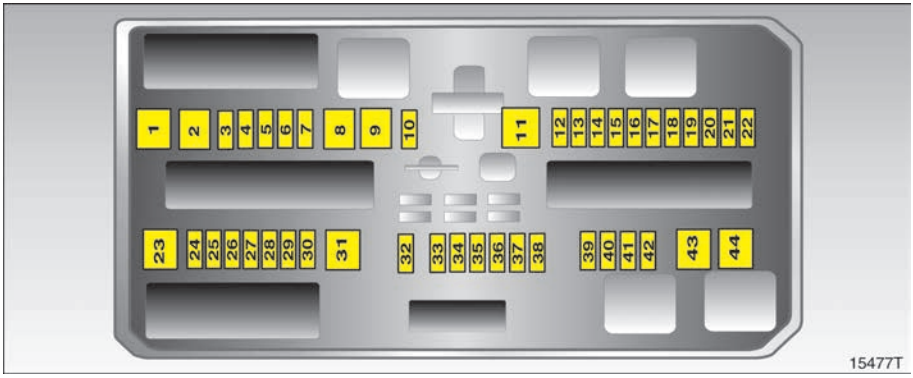
FUSES cont.



Fuse box (Type A) in the luggage compartment

1	Fog lamps	(15A)
2	–	
3	Luggage compartment accessory socket	(15A)
4	Reverse lamps	(7.5A)
5	Electric windows, rear	(30A)
6	Air conditioning system	(10A)
7	Electric windows, front	(30A)
8	Heated exterior mirrors	(7.5A)

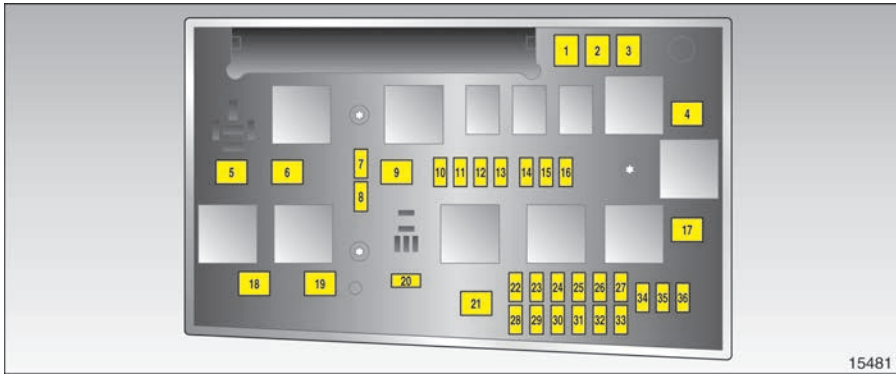
FUSES cont.



Fuse box (Type B) in the luggage compartment

1	Electric windows, front	25 A
2	–	
3	Instruments	7.5 A
4	Heating, air conditioning, climate control system	5 A
5	Airbags	7.5 A
6	–	
7	–	
8	–	
9	–	
10	–	
11	Heated rear window	25 A
12	Tailgate wiper*	15 A
13	Parking distance sensor*	5 A
14	Heating, air conditioning system	7.5 A
15	–	
16	Seat occupancy recognition, open start system*	5 A
17	Rain sensor, air quality sensor, tyre pressure monitoring system, interior mirror*	5 A
18	Instruments, switches	5 A
19	–	
20	CDC*	10 A
21	Heated exterior mirrors	7.5 A
22	Sunroof*	20 A
23	Electric windows, rear*	25 A
24	Diagnostics plug	7.5 A
25	–	
26	Electrically retractable exterior mirrors*	7.5 A
27	–	
28	–	
29	Front accessory socket	15 A
30	Rear socket*	15 A
31	–	
32	–	
33	Open start system*	15 A
34	Sun roof, TwinTop*	25 A
35	Rear socket*	15 A
36	Towing equipment	20 A
37	–	
38	Central locking system, clamp 30	25 A
39	Seat heater, left*	15 A
40	Seat heater, right*	15 A
41	–	
42	–	
43	–	
44	–	

FUSES cont.



Fuse box in the engine compartment

1	ABS	20 A
2	ABS	30 A
3	Interior fan climate control system	30 A
4	Interior fan, heating, air conditioning system	30 A
5	Radiator fan 1(1)	30 A, 40 A
6	Radiator fan 1(2)	20 A, 30 A, 40 A
7	Windscreen washer system	10 A
8	Horn	15A
9	Headlamp wash system	25A
10	–	
11	–	
12	–	
13	Fog lamps	15 A
14	Windscreen wipers	30 A
15	Windscreen wipers	30 A
16	Electronics Control units, open start system, ABS brake lamp switch, TwinTop*	5 A
17	Diesel filter heating*	25 A
18	Starter	25 A
19	Transmission electronics	15 A
20	Air conditioning system	10 A
21	Engine electronics	20 A
22	Engine electronics	7.5 A
23	–	
24	Fuel pump	15 A
25	Transmission electronics	15 A
26	Engine electronics	10 A
27	Power steering	5 A
28	Transmission electronics	5 A
29	Transmission electronics	7.5 A
30	Engine electronics	10 A
31	–	
32	Brake system, air conditioning system, clutch switch*	5 A
33	–	
34	Control unit steering column module	7.5 A
35	Infotainment system	20 A
36	Mobile telephone, digital radio, twin audio, display*	7.5 A

(1) Based on equipment level.

CHAPTER 7

Weekly checks

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Miscellaneous checks.....7-2
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*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

MISCELLANEOUS CHECKS

As well as having your vehicle serviced, there are a few simple weekly checks that ensure the vehicle is kept in good condition. These are shown on the following pages.

The following checks should also be regularly done to ensure proper safety and dependability of your vehicle. Ensure:

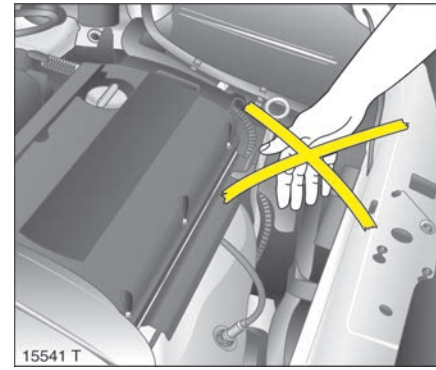
- All exterior lights are working and that their appropriate interior indicators light up when in operation.
- Mirrors and glass are clean and not scratched.
- Automatic transmission shift lever indicator correctly lines up next to the gear selected.
- The aim of water on the windscreen or tailgate and condition of the wipers.
- Demister operates.
- Condition and operation of all seat belts (give them a sharp tug to make sure that they will lock when necessary) and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.

WARNING

- If the engine temperature is high, the cooling fan may remain on for several minutes after turning off the ignition.
- The engine cooling fan can start working unexpectedly, even when the engine is not running and the ignition is off.

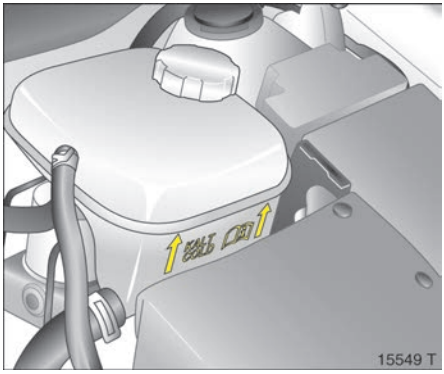
WARNING

Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.



UNDER BONNET CHECKS

ENGINE COOLANT LEVEL



Check the level of the coolant at least once a week. This is simply a matter of looking at the level in the plastic container when the engine is cold.

The level should be slightly above the **KALT/COLD** mark when the engine is cold. The level rises when the engine is running and drops again when the engine cools down. If the level falls below the cold mark the coolant should be topped up to a little over the mark.

The coolant for your vehicle is specified in chapter 8, *Specifications*.

When topping up, first mix a solution of 50% coolant and 50% water.

Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your warranty.

You can temporarily use plain water in the cooling system in an emergency situation. However, obtain the correct coolant as soon as possible from the nearest Holden Dealer.

Remember to replace the coolant cap and tighten it as far as it will go.

Note Specified coolant contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This coolant also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to –30 °C, provided the correct concentration is maintained.

Refer to *Engine overheating* in chapter 6.

If you need to regularly top up the cooling system, see your Holden Dealer.

WARNING
Corrosion inhibitors and antifreeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention. Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

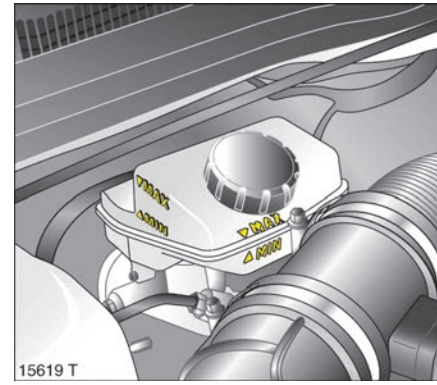
UNDER BONNET CHECKS cont.

BRAKE/CLUTCH FLUID LEVEL

WARNING
Do not let brake/clutch fluid touch your skin or eyes. If you do get fluid in your eyes or on your skin, wash the affected area thoroughly with soap and water or hand cleaner.

Do not spill brake fluid on the vehicle's exterior surfaces. It can damage the paint work. If you do, wash it off immediately.

The vehicle is fitted with one reservoir for both the brake fluid and the clutch fluid (on manual transmissions).



The fluid should be kept at the proper level between the **MIN** and **MAX** lines on the reservoir.

If the brake fluid level is low, the brake system warning lamp will come on. Refer to *Warning/reminder indications* in chapter 1A.

Note If the reservoir requires constant topping up, it could indicate that a fault exists. Contact your Holden Dealer immediately.

To add brake/clutch fluid:

1. Wipe the cap and top of the reservoir clean to prevent contamination of the brake/clutch fluid. Contaminated fluid can affect the performance and lead to costly repairs.
2. Remove the cap.
3. Add enough fluid to bring the level up to between the MIN and MAX marks on the reservoir.
4. Reinstall the cap.

Use only recommended fluid as outlined in chapter 8, *Specifications*.

Automatic transmission fluid level*

The fluid level for automatic transmission is checked when you take your vehicle to a Holden Dealer for servicing. Refer to the Service/warranty booklet. The automatic transmission fluid level does not require checking by the driver in between these scheduled services.

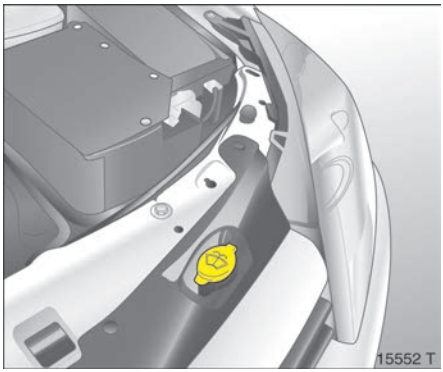
Power steering fluid level

The fluid level for power steering is checked when you take your vehicle to a Holden Dealer for servicing. Refer to the Service/warranty booklet. The power steering fluid level does not require checking by the driver in between these scheduled services.

Special Pentosin fluid is required for the power steering system in this vehicle.

UNDER BONNET CHECKS cont.

WASHER FLUID LEVEL



Washer fluid is used constantly, therefore, check the level weekly and top up as required.

The washer container is for both the windscreen and tailgate washers.

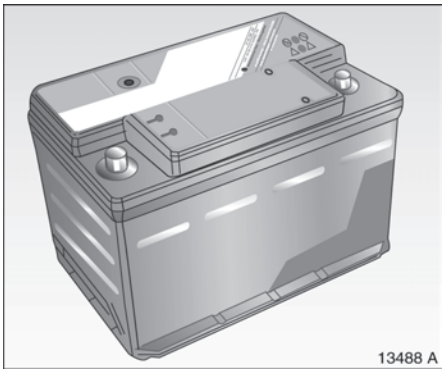
The washer fluid container is located under the bonnet, near the battery.

To fill the reservoir, open the flip-top cap.

For a crystal clear windscreen, use a small amount of cleaning fluid obtained from your Holden Dealer. Refer to *Exterior cleaning* in chapter 10. Do not use ordinary soap or detergent as these not only froth up but will damage the wiper rubbers.

Remember to secure the cap after filling.

BATTERY



Your vehicle is fitted with a maintenance free battery, which means you do not have to check the fluid level.

Note Never disconnect the battery when the engine is running.

If removing the battery for recharging, first disconnect the negative cable, then the positive cable. Never charge the battery while it is still connected to the vehicle. When connecting the battery, first connect the positive cable to the positive post, and then connect the negative cable to the negative post.

UNDER BONNET CHECKS cont.

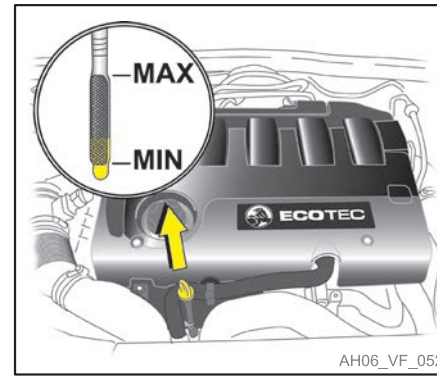
ENGINE OIL LEVEL CHECK

Diesel engines

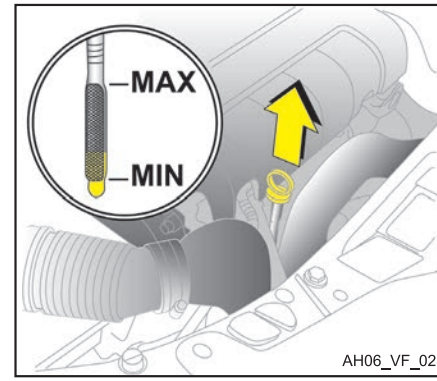
It is normal for every engine to consume some oil. For this reason, check the engine oil level every 500 km or before starting a long trip.

1. Ensure that the vehicle is parked on level ground with the engine (which must be at operating temperature) switched off when you check the oil level.
2. Wait at least two minutes before checking the level to allow the oil to settle. If the engine is cold, the oil may take considerably longer to drain back.
3. To check the level, remove the oil dipstick, wipe it clean and re-insert it as far as it will go.
4. Withdraw the dipstick and look at the oil level.

   Maintain the oil level between the two marks (**MIN** and **MAX**). If you need to add oil, use the engine oil specified in chapter 8, *Specifications*.



Z19DTH (diesel manual)



Z19DT (diesel automatic)

UNDER BONNET CHECKS cont.

ENGINE OIL LEVEL CHECK

Petrol engines

It is normal for every engine to consume some oil. For this reason, check the engine oil level every 500 km or before starting a long trip.

1. Ensure that the vehicle is parked on level ground with the engine (which must be at operating temperature) switched off when you check the oil level.
2. Wait at least two minutes before checking the level to allow the oil to settle. If the engine is cold, the oil may take considerably longer to drain back.
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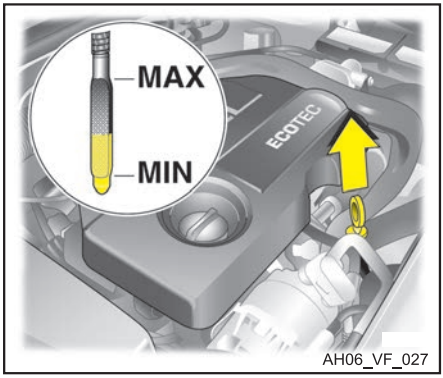
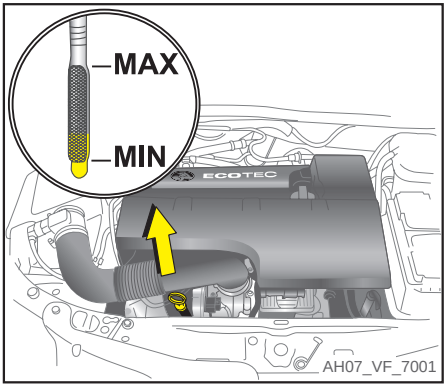
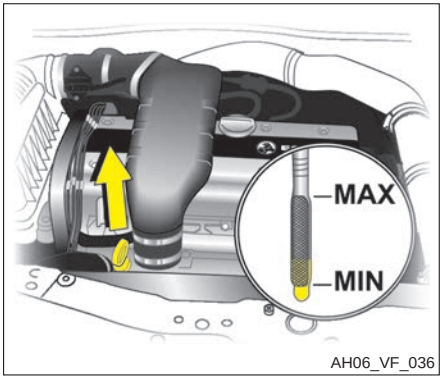


Z18XER (petrol)



Z22YH (petrol)



Z20LER (petrol SRI turbo)

UNDER BONNET CHECKS cont.

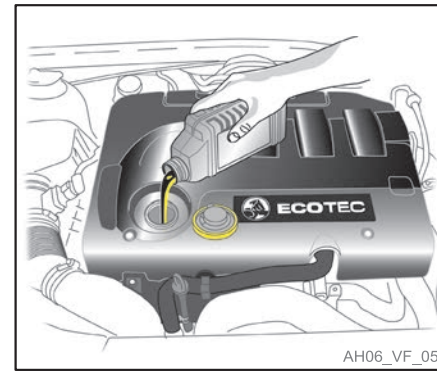
ADDING ENGINE OIL

Diesel engines

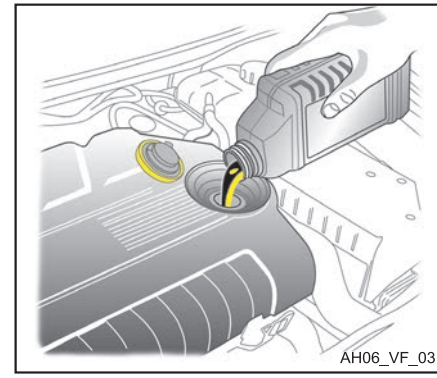
1. To add oil, undo the cap on top of the engine.
2. Add enough oil to bring the oil level to the top mark. As a guide, the distance between the marks represents one litre of oil.
3. Wait a few minutes for the oil to settle.
4. Then check the oil level again. If still too low, add more oil. If now correct, replace the oil cap and the dipstick.
5. Clean up any spilt oil.

Note

- The oil level should not go above the **MAX** mark on the dipstick.
- Do not judge oil consumption until the vehicle has run several thousand kilometres. It may take this long for oil consumption to stabilise.
- Do not use non-detergent or other low-quality oils. Do not use break-in oil, tune up compounds, friction reducing compounds and other supplemental additives. Their use increases costs, may be detrimental to the operation of your vehicle and may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of your Holden vehicle.



Z19DTH (diesel manual)



Z19DT (diesel automatic)

UNDER BONNET CHECKS cont.

ADDING ENGINE OIL

Petrol engines

1. To add oil, undo the cap on top of the engine.
2. Add enough oil to bring the oil level to the top mark. As a guide, the distance between the marks represents one litre of oil.
3. Wait a few minutes for the oil to settle.
4. Then check the oil level again. If still too low, add more oil. If now correct, replace the oil cap and the dipstick.
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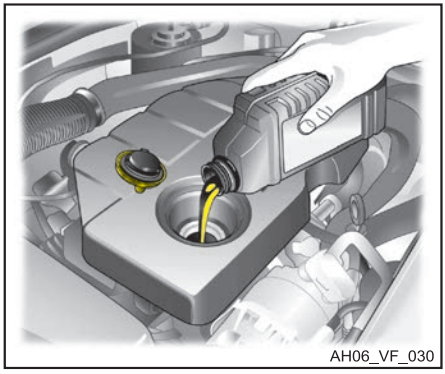
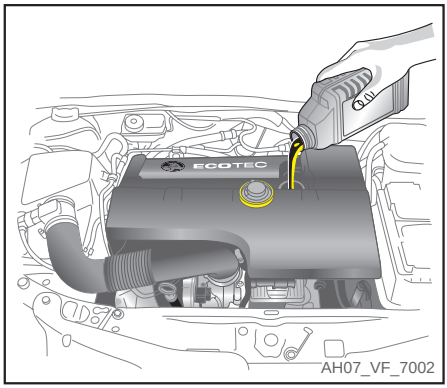
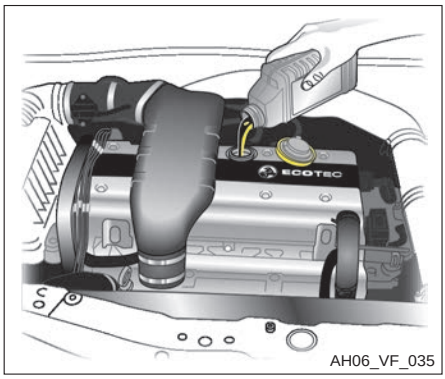

AH06_VF_030

Z18XER (petrol)



AH07_VF_7002

Z22YH (petrol)



AH06_VF_035

Z20LER (petrol SRI turbo)

TYRES

Tyre air pressure

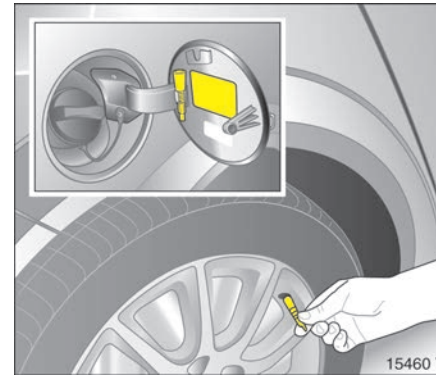
Weekly checking of the air pressure of your tyres (including the spare) ensures your safety, as well as reduces fuel consumption and increases the life of your tyres.

For constant, long distance or rough road travelling, check the tyres daily. For correct pressure for your tyres, refer to the tyre placard on the inside of the fuel filler flap.

If the vehicle is heavily loaded the recommended pressure for the tyres increases and the weekly air pressure check becomes even more important. This is due to the tyres operating under greater load. Refer to the tyre placard on your vehicle.

Tyre inflation pressure increases when the tyres have been driven more than 2 km. Check the pressure when the tyres are cold (stationary for over three hours). If they must be checked immediately after driving, increase the pressure shown on the placard by 10%. Refer to *Specifications* in chapter 8.

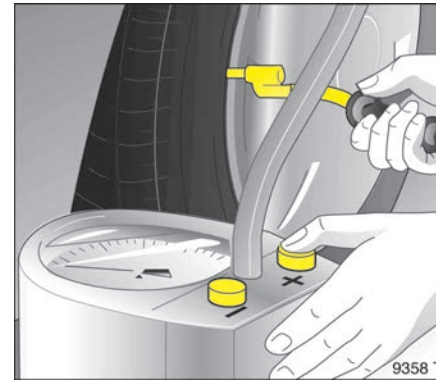
Use the valve cap key to unscrew the valve caps. The key is located inside the tank flap (as illustrated).



Increase the inflation pressure in the tyres according to the load on the vehicle. For example, if the vehicle is loaded to half the maximum payload (as shown in chapter 9, *Tow and load*) then the tyres should be inflated half way between the minimum and maximum pressures given on the tyre placard, which is located inside the fuel filler flap.

For vehicles driven for prolonged periods over rough roads, particularly in outback conditions, use the cold tyre inflation pressure on the tyre placard for maximum load condition.

Always use a tyre pressure gauge to check the tyres – merely looking at the tyres is not sufficient.



Low tyre pressure can result in considerable tyre warm-up and internal damage. This leads to tread separation and even to tyre blowout at high speeds.

High tyre pressure can result in reduced traction, increased risk of tyre blowout and poor tyre wear.

Remember to put back any valve dust caps or extensions, if so equipped. This stops dirt and moisture from fouling the valves.

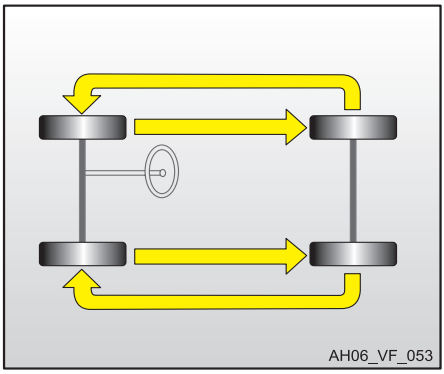
When checking the tyre air pressure, take a look at the condition of the tyre tread and inspect for stones or abnormal wear.

TYRES cont.

Tyre inspection and rotation

Front and rear tyres perform different jobs and can wear differently depending on the types of roads driven, driving habits, wheel alignment, balance and tyre pressures.

Tyres are checked when your vehicle is serviced by your Holden Dealer, who is able to diagnose any unusual signs of wear. If the wheels are rotated, the balance should be checked at the same time.



Heavy treads

Exercise caution when using tyres with heavy treads, including tyres designed to gain traction in bad weather conditions.

At sustained high speeds, this type of tyre runs at higher temperatures than standard tyres and should only be operated within the limits recommended by the manufacturer.

Consult your Holden Dealer concerning the fitness of the tyres for specific purposes.

Wheel replacement

When replacing wheels, ensure that the new wheels are equivalent in diameter, rim width, offset and mounting configuration to those originally installed in your vehicle.

Note Replacing your factory-fitted wheels and tyres with non-specified wheels and tyres may affect your warranty as well as your motor vehicle insurance policy.

Tyre traction

WARNING
A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other material is on the road surface. Driving practises and speed should be adjusted to the road conditions.

When driving on wet roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as ‘aquaplaning’, may cause partial or complete loss of traction, which adversely affects control and stopping ability. To reduce the possibility of traction loss, observe the following precautions:

- Reduce speeds during rain storms, when roads are slushy or if the road has standing water or puddles.
- Replace tyres when the tread has worn down to the wear indicators.
- Check that tyres are properly inflated.

Alignment and balance

Improper wheel alignment can cause the tyres to wear faster and unevenly. It can also cause the vehicle to pull to the left or right. Out-of-balance wheels and tyres can cause annoying vibration and uneven tyre wear such as cupping and flat spots.

If you have any reason to suspect that either of the above problems exist, have your Holden Dealer perform a wheel alignment and balance check.

TYRES cont.

Tyre replacement and repair

WARNING
Do not mix different tyre construction types, such as radial and cross ply, on your vehicle except in emergencies, because your vehicle's handling could be affected and may result in loss of control.

When replacing tyres you should use the same size, load rating and construction type as the original tyres on your vehicle. Refer to the tyre placard on the inside of the fuel filler flap for tyre size and load rating. Using a different size or type of tyre may affect such things as ride, handling, speedometer/odometer calibration, ground clearance and tyre clearance to the body or chassis.

Tyres with a higher speed rating and/or maximum load rating in excess of that listed are also acceptable as replacements provided they are fitted to a suitable rim size.

Fit new tyres in pairs to the front. When replacing only one tyre, pair it on the same axle with the least worn of the other three.

Replace your tyres when:

1. The tyres are worn to the point where the tread wear indicators, as shown, appear or the cord or fabric is showing.
2. The tread or side wall is cut, split, or cracked deep enough to expose the cord or fabric.
3. The tyre has a bump or bulge in it, indicating some kind of internal damage.
4. The tyre has a puncture, cut or other damage which cannot be repaired because of the size or location of the damage.

If in doubt about the extent of damage to the tyre, have it removed from the wheel and examined by a tyre specialist.

If a pressure loss occurs while driving, do not attempt to drive on the deflated tyre more than is necessary to stop safely. Driving even a short distance on a deflated tyre can damage it and the wheel beyond repair.

Remove the object which has punctured the tyre and make repairs in accordance with the tyre manufacturer's recommendations.

WARNING
Tyres which have been repaired or retreaded cannot be operated safely at high speeds, therefore, their use is not recommended.

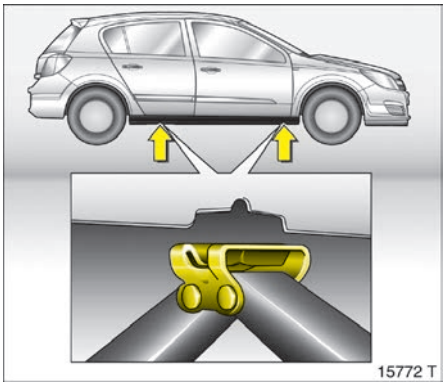
TROLLEY JACK/HOIST LOCATIONS

You should always use the jack locations (refer to *Flat tyre* in chapter 6) when using the original jack supplied with your vehicle.

This jack has been designed to correctly and safely lift your vehicle, provided the warnings in chapter 6, *Emergencies* are observed.

However, if using a trolley jack or hoist to raise the vehicle, it is important that the trolley jack or hoist be positioned as shown.

When using lifting or jacking equipment with metal jaws, use a rubber pad to avoid damage to the vehicle.



WARNING
On the TwinTop, the roof must be closed before the vehicle is raised. Refer to *TwinTop convertible hardtop* in chapter 3.

NOTES

CHAPTER 8

Specifications

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Identification labels 8-10

*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

SPECIFICATIONS

Engine type	**Z18XER Petrol**
Engine capacity	1796 cc
Engine power and torque	Please refer to holden.com.au
Engine oil specification	ACEA Service classification A3, B3 viscosity grade 0W-30/40 or 5W-30/40
Refill oil capacity (including filter)	4.5 L approximately
Fuel tank capacity	52 L
Coolant capacity	5.9 L (auto) approximately 6.9 L (man) approximately
Coolant specification	50 % clean water and 50 % anti-freeze coolant conforming to GM6277M specification
Brake and clutch fluid	Heavy duty brake fluid DOT 4
Battery specification	12 volts, 66 amp hours
Battery for remote control	CR 20 32

SPECIFICATIONS cont.

Engine type	**Z20LER Petrol turbo**
Engine capacity	1998 cc
Engine power and torque	Please refer to holden.com.au
Engine oil specification	ACEA Service classification A3, B3 viscosity grade 0W-30/40 or 5W-30/40
Refill oil capacity (including filter)	4.3 L approximately
Fuel tank capacity	52 L
Coolant capacity	7.1 L approximately
Coolant specification	50 % clean water and 50 % anti-freeze coolant conforming to GM6277M specification
Brake and clutch fluid	Heavy duty brake fluid DOT 4
Battery specification	12 volts, 66 amp hours
Battery for remote control	CR 20 32

Note

- The Z20LER engine has been developed for operation on premium unleaded (95 RON) fuel.
- If no unleaded premium fuel is available, 91 RON can be used taking care to avoid high engine load or full load as well as for driving in mountainous terrain with a caravan/trailer load or high payload.

SPECIFICATIONS cont.

Engine type	**Z22YH Petrol**
Engine capacity	2198 cc
Engine power and torque	Please refer to holden.com.au
Engine oil specification	ACEA Service classification A3, B3 viscosity grade 0W-30/40 or 5W-30/40
Refill oil capacity (including filter)	5.0 L approximately
Fuel tank capacity	52 L
Coolant capacity	6.7 L approximately
Coolant specification	50 % clean water and 50 % anti-freeze coolant conforming to GM6277M specification
Brake and clutch fluid	Heavy duty brake fluid DOT 4
Battery specification	12 volts, 66 amp hours
Battery for remote control	CR 20 32

WARNING
Do not use fuel containing more than 5% ethanol as this will cause damage to the emission control system and engine. Refer to *Fuel* in chapter 5.

SPECIFICATIONS cont.

Engine type	**Z19DT Diesel automatic**
Engine capacity	1910 cc
Engine power and torque	Please refer to holden.com.au
Engine oil specification	ACEA Service classification A3, B4 viscosity grade 0W-30/40 or 5W-30/40
Refill oil capacity (including filter)	4.3 L approximately
Fuel tank capacity	52 L
Coolant capacity	7 L approximately
Coolant specification	50 % clean water and 50 % anti-freeze coolant conforming to GM6277M specification
Brake fluid	Heavy duty brake fluid DOT 4
Battery specification	12 volts, 70 amp hours
Battery for remote control	CR 20 32

WARNING
Use only Ultra Low Sulphur Diesel (ULSD) fuel in diesel engine vehicles, to avoid damage to the emission control system and engine. Refer to *Fuel filling* in chapter 5.

SPECIFICATIONS cont.

Engine type	**Z19DTH Diesel manual**
Engine capacity	1910 cc
Engine power and torque	Please refer to holden.com.au
Engine oil specification	ACEA Service classification A3, B4 viscosity grade 0W-30/40 or 5W-30/40
Refill oil capacity (including filter)	4.3 L approximately
Fuel tank capacity	52 L
Coolant capacity	7 L approximately
Coolant specification	50 % clean water and 50 % anti-freeze coolant conforming to GM6277M specification
Brake and clutch fluid	Heavy duty brake fluid DOT 4
Battery specification	12 volts, 70 amp hours
Battery for remote control	CR 20 32

WARNING
Use only Ultra Low Sulphur Diesel (ULSD) fuel in diesel engine vehicles, to avoid damage to the emission control system and engine. Refer to *Fuel filling* in chapter 5.

SPECIFICATIONS cont.

Transmission

Transmission	Transmission fluid type	Clutch fluid type
5 speed manual transmission petrol engine	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-0 or equivalent)	Heavy duty brake fluid, DOT 4
6 speed manual transmission petrol engine	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-0 or equivalent)	Heavy duty brake fluid, DOT 4
6 speed manual transmission diesel engine	Refer to your Holden Dealer part no. 93165290	Heavy duty brake fluid, DOT 4
4 speed automatic transmission petrol engine	Auto trans fluid, meeting Holden spec. no. HN2287 (Esso JWS 3305G)	–
6 speed automatic transmission diesel engine	Refer to your Holden Dealer part no. 93165147	–

SPECIFICATIONS cont.

Dimensions (mm)

	3 door hatch			
	CD	CDX	SRI turbo	SRI
Length	4250	4250	4290	4250
Width - excl. mirrors	1753	1753	1753	1753
Width - incl. mirrors	2033	2033	2033	2033
Height	1435	1435	1435	1435
Wheel base	2614	2614	2614	2614
Front track	1488	1484	1484	1480
Rear track	1485	1481	1481	1477

Dimensions (mm)

	5 door hatch			
	CD	CDX	SRI	CDTI
Length	4249	4249	4249	4249
Width - excl. mirrors	1753	1753	1753	1753
Width - incl. mirrors	2033	2033	2033	2033
Height	1460	1460	1460	1460
Wheel base	2614	2614	2614	2614
Front track	1488	1484	1480	1484
Rear track	1485	1481	1477	1481

SPECIFICATIONS cont.

Dimensions (mm)

	5 door wagon	
	CD	CDX
Length	4515	4515
Width - excl. mirrors	1753	1753
Width - incl. mirrors	2033	2033
Height	1500	1500
Wheel base	2703	2703
Front track	1488	1484
Rear track	1485	1481

Dimensions (mm)

	TwinTop
Length	4476
Width - excl. mirrors	1759
Width - incl. mirrors	2021
Height	1411
Wheel base	2614
Front track	1492
Rear track	1486

IDENTIFICATION LABELS

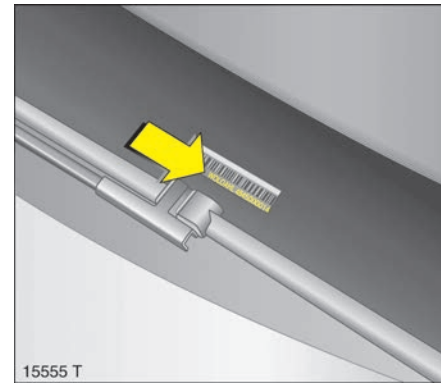
Vehicle identification number stamp

This stamp shows the International Standards Organization Vehicle Identification Number (ISOVIN), which should be used for identification with spare parts.

The number can be found in one of three positions:

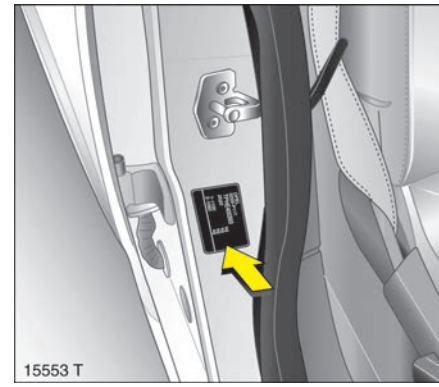
1. Stamped onto the sill inner panel under a cover, on the right side of the driver's seat.

2. Behind the windscreen on the passengers's side.



3. Printed on the identification label located on the driver's side front door frame.

Refer to the following page for the breakdown of the ISOVIN number.



Holden identification plate*

The identification plate is located to the left side of the washer fluid container refill cap. The Holden number is used for warranty and roadside assistance identification.

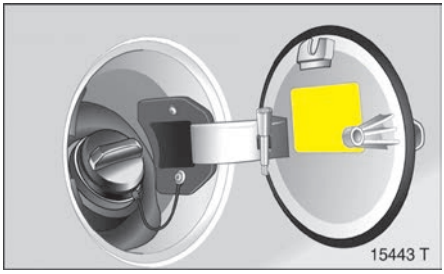
IDENTIFICATION LABELS cont.

Compliance plate

The safety compliance plate is located inside the engine bay, on the bulkhead.

Tyre placard

The tyre placard is located on the inside of the fuel filler flap.



Vehicle identification number (ISOVIN)

The individual ISOVIN (example below) appears on the Compliance Plate on the bulkhead in the engine compartment. For other ISOVIN locations refer to previous page. This number is used for identification of parts.

W	0	L	0	A	H	L	4	8	7	8	1	2	3	4	5	6

Sequential Production Serial Number

Assembly Plant Code, can be alpha or numeric

Model Year Code: 7 = 2007, 8 = 2008

Body style: L08 = 3 door hatch
L35 = 5 door wagon
L48 = 5 door hatch
L67 = 2 door convertible TwinTop

A = model series, H = variant

One zero (blank)

World Manufacturer Identifier

NOTES

CHAPTER 9

Tow and load

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*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

LOADING THE VEHICLE

Loading aid (TwinTop)

The loading aid makes it possible to comfortably load the luggage compartment when the roof is open. Pressing the button will raise the folded roof in the luggage compartment 25 cm. This enlarges the load opening of the luggage compartment.

WARNING

Take care when operating the loading aid. Make sure that nothing could become caught or jammed. Make sure no one is in the action zone during operation, this is especially important for children. Inform passengers accordingly.

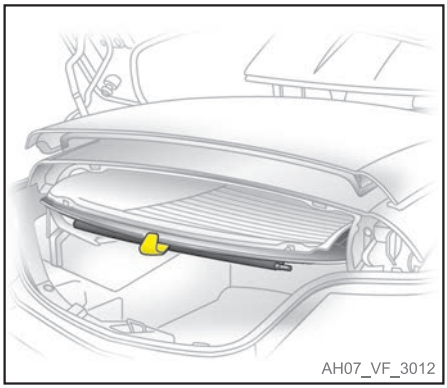
Note

- Do not place objects on or near the luggage compartment blind.
- The folded roof can only be lowered when the luggage compartment blind is closed. Otherwise, a warning tone will sound three times.
- Movement can only be stopped by pressing the button. Holding the button depressed will change the direction of movement.
- A confirmation tone sounds when the folded roof reaches its raised or lowered position.
- Only close the boot lid once the confirmation tone has sounded to indicate that the loading aid has reached its lowered position.
- If the loading aid is not in its lowered position when attempting to close the boot lid a warning tone sounds.
- Do not touch any of the loading aid components or the folded roof while it is being raised or lowered.
- The loading aid is only operational when the vehicle is unlocked.

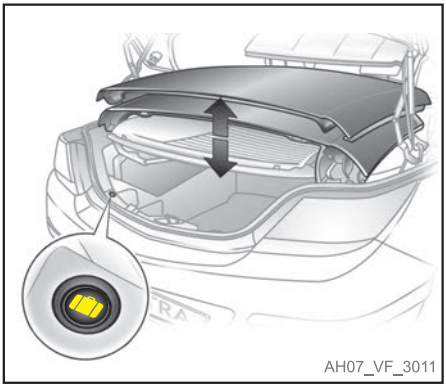
LOADING THE VEHICLE cont.

Loading aid (TwinTop)

1. Open the boot lid.
2. Unhook the luggage compartment blind and attach it to the rear window frame.


AH07_VF_3012

3. Press and hold the button – the folded roof is raised.
4. To close, detach the luggage compartment blind from the rear window frame and engage it in the recess on the left and right. The blind must be perfectly flat when closed.
5. Press and hold the button – the folded roof is lowered.
6. Close the boot lid only after the confirmation signal has sounded, otherwise the roof could be damaged.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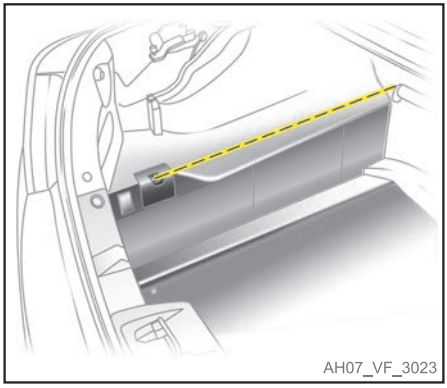
WARNING

- Do not load the luggage compartment higher than the load height marking shown.
- Do not allow any objects underneath the blind to push it upwards.
- Do not place any objects on top of the blind, otherwise both the roof and the load will be damaged if loading aid is closed.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LOADING THE VEHICLE cont.

Maximum rear axle load

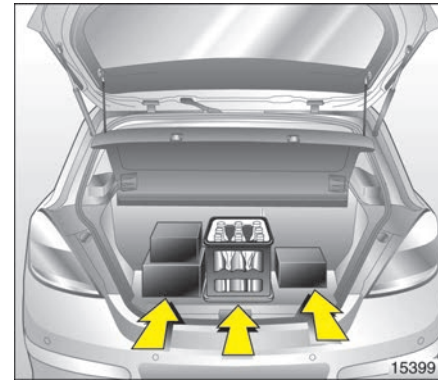
The maximum allowable rear axle load for your vehicle is shown in the adjacent table.

Note

- Remember to take the tow bar ball load into account when determining the rear axle load.
- Remember to take the weight of the roof rack and the roof rack load into account when determining the rear axle load.

WARNING
The TwinTop is designed primarily to carry passengers. It is not designed or intended to be used for towing.

Vehicle	Rear axle load
3 door	840 kg
5 door	860 kg
Wagon	940 kg
TwinTop	955 kg



Overloading your vehicle is a safety hazard and could also shorten the life of the vehicle and its parts.

The recommended carrying capacity of your vehicle is show below.

Vehicle	Occupants (at an average of 68 kg each)	Luggage (kg)	Total load (kg)
3 door	5	68	408
5 door	5	68	408
Wagon	5	68	408
TwinTop	4	54	326

Note If you load your vehicle other than to the above recommendations, ensure you do not exceed the maximum rear axle load.

LOADING THE VEHICLE cont.

Roof rack loads

WARNING

For safety reasons, and to avoid damaging the roof, use only the roof rack approved by Holden for your vehicle.

The maximum allowable roof load is 75 kg (including the weight of the roof racks).

Roof rack loads alter the handling of a vehicle due to a change in the centre of gravity. Avoid abrupt swerving or sharp steering when carrying loads on the roof rack.

Roof racks and roof loads are not permitted on the TwinTop convertible hardtop.

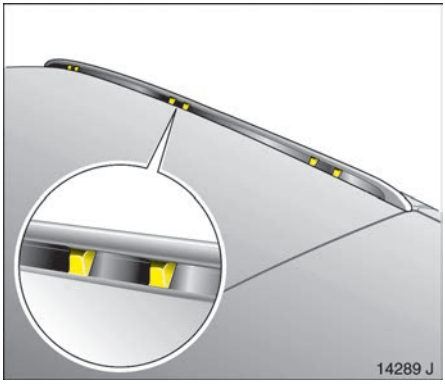
Distribute the load evenly and do not drive faster than 120 km/h. You must include the weight on the roof rack when working out the maximum rear axle load – treat the roof rack load as luggage.

Roof racks mounts (vehicles without railings)

1. Lift the covers from the fitting openings.
2. Attach the roof rack at appropriate points.

Roof racks mounts (vehicles with railings)

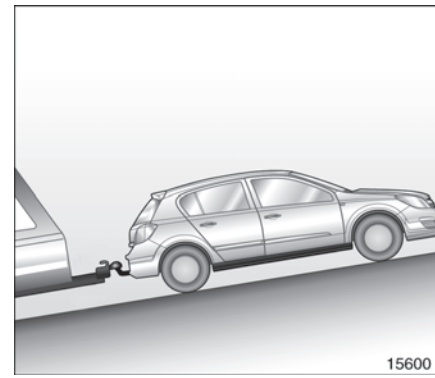
Attach the roof rack to the roof railings at points indicated.



TOWING

Your vehicle is designed primarily as a passenger vehicle, so handling, durability and economy may be affected by towing a caravan or trailer.

Ensure the correct equipment is fitted before towing.



Towing capacity

The maximum towing capacity for your vehicle is shown in the adjacent table.

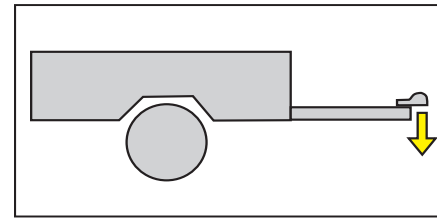
Reduce the maximum towing and loading limits in higher elevations and/or mountainous terrain.

Vehicle	Braked	Unbraked
3 door	1300 kg	630 kg
5 door	1300 kg	630 kg
Wagon	1250 kg	630 kg
TwinTop	N/A	N/A

WARNING
The TwinTop is designed primarily to carry passengers. It is not designed or intended to be used for towing.

Tow bar ball load

When a trailer is connected to the towing vehicle, some of the weight of the trailer is applied through the tow ball to the tow bar and towing vehicle. This weight is called the ‘tow bar ball weight’ or ‘ball load’.
If the ball load is too light or too heavy, the steering, handling and ride characteristics of the vehicle can be adversely affected.



As a general guideline, for single axle trailers, the ball load should be approximately 10% of the loaded trailer mass. For heavy trailers with more than one axle, the ball load should be in the range 5% - 10% of the loaded trailer mass.
Check the ball load capacity of your towing equipment. This may be called the ‘Maximum Down Load’, ‘Maximum Vertical Load’, ‘Maximum Ball Load’ or similar and will be specified on your tow bar.
Establish a target ball load that is in accordance with the recommendations (above) and within the capacity of the towing equipment.
Check the ball load (compare with the target) before coupling the trailer to the towing vehicle.
The ball load can be adjusted by redistributing the contents of the trailer i.e. by moving the contents of the trailer forward or backward within the trailer so as to change the trailer’s balance.
For further information, contact the roads authority in your relevant country/State.

TOWING cont.

Safe towing tips

- Vehicles handle differently when towing. To get comfortable with this change, make a couple of short distance trips with the trailer/caravan before you set off on the actual trip.
- Have your vehicle correctly maintained and serviced.
- Have your trailer/caravan maintained and serviced, with particular attention given to condition of brakes, tyres, suspension, wheel bearings, towing coupling and lighting.
- Have an extended-arm mirror fitted on both sides of your vehicle.
- Headlights may need realigning after the loaded caravan has been hitched, particularly if a load equalising hitch is not used.
- Use a lower gear, rather than your brakes, when descending steep hills.

Towing precautions

- When heavily loading your vehicle or when towing, inflate the tyres to the maximum recommended pressure. Refer to *Tyres* in chapter 7.
- Secure loads so that they cannot slip and place them in the centre of the trailer/caravan if possible; that is, above the axle.
- Ensure the brakes on the trailer/caravan are designed to cope with the braking requirements of that trailer/caravan under all towing conditions. If they are not, they could adversely affect the brakes on the vehicle.
- Make sure that you have enough room when cornering and avoid sudden manoeuvres.
- Use a stabiliser to dampen rolling motions in the case of trailer/caravans with low directional stability.
- The cooling fan is driven electrically and so is not dependant on engine speed. At high engine speeds a lot of heat is produced and at low engine speeds correspondingly less heat is produced. For this reason, when driving uphill, do not shift down into a lower gear (which will increase engine speed) whenever the vehicle can still climb the hill in the higher gear.
- Whenever a towbar is removed, be certain to have any mounting holes in the underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.
- Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the towbar tongue when it is not required for towing.

Note Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the vehicle arising from the use of such equipment or for loss or injury caused by use of such equipment. The use of such equipment may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle.

NOTES

CHAPTER 10

Cleaning

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*The asterisk signifies equipment options not in all vehicles; model variants, engine options, optional equipment and Genuine Holden Accessories (and Parts).

INTERIOR CLEANING

WARNING
Many cleaners are toxic, flammable or can damage the interior of your vehicle. When cleaning the interior, avoid volatile cleaners such as acetone, lacquer thinners, enamel reducers and nail polish removers. Also avoid cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose.

Be sure the vehicle is well ventilated while using any cleaners and always follow the cleaner manufacturer's recommendations.

Care and cleaning of upholstery

Dust and dirt accumulates on upholstery and should be removed with a vacuum cleaner every few weeks; more often with constant driving. Before attempting to remove spots and stains, it is necessary to determine:

- The type of fabric.
- The nature and age of the stain.
- The effect of the stain removal agent upon the colour, structure and general appearance of the upholstery.

Remove stains as soon as possible. If they are allowed to remain on the fabric for any length of time, they very often become oxidised or set and removal becomes difficult, if not impossible.

Cleaning vinyl (PVC) coated fabrics

PVC-coated fabrics are used for seating and auxiliary trimming. Fabric grades vary according to their function. PVC fabrics are generally made by coating fabric with synthetic resins. Taking care of PVC fabric is relatively simple, but important. Wipe over the surface with a dry cloth during the regular cleaning of the vehicle.

Should dirt accumulate and become embedded in the material pattern, do the following:

1. Using lukewarm water and soap (or Holden Velour Fabric and Vinyl Cleaner), work up thick suds on a piece of cheesecloth and apply to the surface. Use a soft bristle brush to remove stubborn stains or dirt embedded in the grain of the material.
2. Repeat using only a damp cloth (no soap).
3. Wipe dry with a soft cloth. The above cleaning instructions also apply to the rubber floor mats.

Cleaning leather trim*

To remove surface dust and grit, regularly wipe the leather with a mild detergent diluted in warm water using a soft cloth or sponge.

Clean leather every three months with Holden Leather Cleaner or a mild saddle soap and a damp soft cloth to remove in-ground dirt which is not visible. Allow leather to dry naturally and apply Holden Leather Protector or a colourless beeswax dressing.

To revitalise the leather upholstery use Holden Leather Revitaliser.

INTERIOR CLEANING cont.

Cleaning cloth trim

To clean seats upholstered with cloth, observe the following instructions:

- Remove loose dirt and dust with a vacuum cleaner or soft brush.
- Do not use a whisk broom or a coarse hair brush.
- If normal soiling takes place, sponge the fabric lightly with warm water containing a detergent and a small amount of ammonia. Next, rub the fabric lightly and, if necessary, sponge again to remove stubborn stains. Soak up excess fluid with a dry cloth. Clean the fabric sparingly using Holden Velour Fabric and Vinyl Cleaner.

Vehicles with airbags

Use only a dry cloth or mild cleaner to clean the steering wheel and instrument panel. Do not use any aggressive cleaning agents.

Cleaning carpet

Thoroughly brush or vacuum the carpet. In many instances the carpet requires no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt then, using Holden Velour Fabric and Vinyl Cleaner, clean approximately one square foot at a time.

After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner.

Cleaning seat belts

WARNING
Do not bleach or dye seat belts as this can severely weaken them.

Cleaning interior glass

Clean the interior glass area of the vehicle with Holden Glass Cleaner and a clean soft cloth. Take care not to damage the demister when cleaning inside the rear window.

Never use abrasive cleaners on any vehicle glass, as they may cause scratches.

EXTERIOR CLEANING

Caring for paint

To help preserve your vehicle's new finish, give special attention to treating those conditions that can damage the paint. Conditions include:

Road bloom: Oils, dirt, exhaust and other pollutants may combine to affect the paint finish if they are allowed to build up over a long period of time.

Etching: Tree sap, bird droppings, salt water and other natural deposits can leave etching or scarring if allowed to stay on the paint.

Pitting: Tar spots and some industrial fallout can react chemically and may cause pitting to the surface of the paint.

Paint inspection

Regularly inspect the vehicle for scratch marks, cracks or damaged areas, all of which could develop rust. Repair any deep scratches, cracks or breakdown in the finish immediately.

Take care to ensure any rust is repaired immediately otherwise rust 'creep' will extend beyond the damaged area. This occurs particularly in tropical or coastal areas, where the moist or salt-laden air accelerates rusting.

The paint finish of the vehicle gives a very high degree of protection against the weather, but be aware that wear and deterioration occurs when the vehicle is exposed to the elements for prolonged periods.

Park the vehicle in a garage whenever possible.

To prevent damage to the paint surface, remove foreign matter immediately. Foreign matter such as bird droppings should be removed within 24 hours due to the acidity.

Washing your vehicle

The easiest way to keep the paint looking as new is to keep it clean. A wash once a week will keep your vehicle in good condition. However, it must be washed correctly.

Note

- Never use an automatic wash that requires anything touching the paint (other than water).
- Wash your vehicle once a week to remove build up of any grime on the paint.
- Never wash your vehicle in direct sunlight; find a shady spot to wash your vehicle.

1. Wet the vehicle thoroughly from top to bottom with plenty of cold water (in accordance with current water restrictions, if any). This removes any grit or other loose particles and substances. Do not use a sponge or cloth at this stage.
2. Fill a bucket with lukewarm water and add no more than two caps full of gentle detergent. Do not use hot water, strong soap or chemical detergents.
3. To remove bird droppings, soak the area with a wet sponge for several minutes before washing off. If this does not work, use a solution of one litre of water and 110 grams of dissolved baking soda (bicarbonate of soda). Rinse with clean water.
4. Starting with the roof, use a clean sponge to clean a small section at a time. Do not allow liquid to dry before rinsing it off with clean water. When you have completed each section, rinse the whole vehicle again with cold water.
5. Dry the clean vehicle thoroughly with a good quality chamois.

Note Avoid using high-pressure jet cleaners around the TwinTop roof area.

EXTERIOR CLEANING cont.

WARNING
Take care when moving the vehicle after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Removing stains, such as grease, oil and tar spots

Washing your vehicle regularly ensures most harmful substances deposited on the paint are removed before they can cause permanent damage. However, some substances are difficult to remove. If you notice stains on the paint, ensure you remove them at the earliest possible opportunity.

Remove grease, oil and even fresh tar from the paint with a little kerosene or turpentine. As a precaution against staining, wash and polish the area as soon as possible after the stain has been removed.

A rubbing or cutting compound can be used after a normal wash. Do not do this on a regular basis as it removes paint.

WARNING
- Some chemical cleaners used for removing road oils and tars from painted surfaces are detrimental to automotive paint.
- If fuel is spilt on the paint when refilling, flush it off immediately with clean water, as fuel has a tendency to stain or soften new paint finish during the weathering out period, particularly when the vehicle is exposed to high temperatures.
- Do not use fuel to clean any painted or plastic surfaces.

EXTERIOR CLEANING cont.

Ventilation system intake

The intake area between the bonnet and windscreen may collect leaves, which impairs air flow into the vehicle. Clear this area of debris whenever you wash your vehicle.

Under vehicle washing

Your vehicle has a factory-applied PVC undercoating in the wheel arches (including longitudinal members) which provides permanent protection and needs no special maintenance.

The surfaces of the vehicle underside not covered by PVC are provided with a durable protective wax coating. Once a year, preferably before the start of the cold season the wax coating and PVC coating should be checked and if necessary, restored to perfect condition.

Commercial bitumen and rubber materials can damage PVC coating. Have all work on the underbody performed by a Holden Retailer, as it requires knowledge of the specified materials and experience concerning their application.

Wash the underbody following the end of the cold weather season to remove any dirt adhering to the underbody, since this may also contain salt.

Polishing

Under normal circumstances the paint does not need polishing to retain its shine; a weekly wash is sufficient. However, the use of a Polymer Glaze approximately every three months reduces the effects of road bloom by removing natural contaminants that can build up on the paint.

Note Do not attempt to apply a polish without first washing the vehicle to remove loose grit, surface dirt, dust and grease.

Tyres

Sponging with cold water is sufficient for normal tyre cleaning. Oil and grease should be removed with soap and water or detergent. For tar or other substances, use a mild abrasive, such as mechanic's hand soap or kitchen cleaning powder. Thoroughly rinse the tyres. Do not use fuel to clean tyres.

Original or 'new' tyre look can be restored using Holden Tyre and Bumper Shine.

Alloy wheels

To preserve the original appearance of alloy wheels, keep them clean and free from road dirt. Use Holden Wheel Cleaner for cleaning alloy wheels. Do not use abrasive cleaners on alloy wheels.

EXTERIOR CLEANING cont.

Glass cleaning

Avoid scratching the glass. If the glass is cleaned at the same time as the rest of the vehicle, particles of grit may cause fine scratches. Flush off any mud on the glass when washing the body, but leave the final cleaning and polishing until afterwards.

Use Holden Glass Cleaner and wash each section of the glass in turn, making sure that the water, its container and the sponge are clean and free from grit. Old linen cloth is better than new material for polishing glass.

Windscreen

Always keep the windscreen clean so the wiper blades are as effective as possible. Old wiper blades can cause scratches and should be regularly inspected and replaced if necessary.

Never use abrasive cleaners to clean glass as they can cause scratches, impairing night vision. After the windscreen has been cleaned with a wet sponge, wipe it with a soft, lint-free cloth or chamois.

It is recommended that Holden Optikleen be added to the windscreen washer reservoir.

Wiper blades

Oil and road scum thrown up on the windscreen will cause smearing when the wipers are switched on. Many owners do not clean the wiper blades, despite cleaning the windscreen. Consequently, the smearing of the glass reappears as soon as the wiper blades are next used, as dirt accumulates in the blades.

Clean the blades by lifting them off the windscreen and cleaning with Holden Optikleen and a clean cloth.

Note Do not operate the wiper blades by hand as this may damage the wiper drive mechanism.

If using the wiper blades to clean dust and dirt from the windscreen in dry conditions, always use the washer system first to wet the windscreen. Ensure that the windscreen washer reservoir is not empty.

Should the wiper blades freeze to the windscreen, lift them off by hand before switching on the wipers.

CLEANING PRODUCTS

Part number	Size	Description	Usage
92145132	237 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145418	437 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145130	237 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, roof linings, mats and carpets.
92145416	437 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, roof linings, mats and carpets.
92145133	237 ml	Glass Cleaner	Cleans all glass surfaces.
92145419	437 ml	Glass Cleaner	Cleans all glass surfaces.
92140005	500 ml	Optikleen	Windscreen washer solvent.
92140004	5 ml	Optikleen Sachet	Windscreen washer solvent; 1 sachet per washer bottle refill.
92145129	237 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145415	437 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145131	237 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145417	437 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145140	120 ml	Leather Revitaliser	Revitalises the leather upholstery.
92145141	120 ml	Leather Cleaner	Cleans the leather upholstery.
92145142	120 ml	Leather Protector	Protects the leather upholstery.
92145143	1 Kit	Leather Care Kit	Contains leather revitaliser, cleaner and protector.
92145135		Chamois	Cloth for wiping off excess water from the vehicle's exterior after washing and rinsing.
92145134		Handle Grip Sponge	Sponge for washing the vehicle.
92145136		Micro fibre Glass Cleaning Cloth	Cloth for cleaning all glass surfaces.
92145137		Micro fibre General Purpose Cleaning/ Polishing Cloth	Cloth for general purpose cleaning/ polishing.

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